X

PROGRESS REPORT

FOREST ADMINISTRATION

IN

AJMERE

FOR

1876-77,

WITH THE ORDERS OF THE GOVERNMENT OF INDIA.

1877.

CALCUTTA:

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No. 2106S., dated Mount Aboo, 8th August 1877.

From—The Secy. to Governor General's Agent and Chief Commr., Rajputana, P. W. Dept.,

To—The Secretary to the Government of India.

I AM directed by the Officiating Chief Commissioner to submit the half-yearly Forest Progress Report of Ajmere and Mhairwarra for the period ending 31st March 1877, accompanied by the usual statements.

2. I am at the same time to submit the following papers:—

1.—*Detailed* report on each forest tract, giving area, boundaries, and boundary-marks, description of soil, &c., with other particulars regarding villagers' rights and working-plans.

2.—*Statement* showing area of forest tracts, &c.

3.—*Statement* showing the proportionate share of the villagers in the several forest tracts, and in the revenue derived therefrom.

4.—*Statement* showing the cultivation included in the several forest tracts, &c.

5.—*Register* of private and nuzzool trees included in the several forest tracts, &c.

6.—*Statement* of fencing completed and to be completed in the several forest tracts, plantations, and nurseries.

3. The information afforded by the above-named documents was called for in your Nos. 600 and 766, dated, respectively, 8th July and 15th August 1876.

4. With regard to the area of forest tracts, I am to observe that, in the case of certain tracts, the area as shown in the statement attached to the half-yearly progress report slightly varies from that entered in the second and general statement mentioned in paragraph 2, and an explanation of this discrepancy has been called for from the Commissioner.

5. Adverting to the statement of fencing completed and to be completed, I am to remark that the information called for by Government is not fully supplied, as the lengths of boundaries to be kept unfenced are not given. This information can be best given by the maps under preparation, and a set of them will be furnished for the information of Government as soon as received from the Commissioner.

6. In conclusion, I am to enclose copy of an office note reviewing the progress report under notice, and to state that, in the opinion of the Officiating Chief Commissioner, the progress made appears to be very satisfactory, and that the Commissioner and the district officers are to be congratulated thus far on their success in forestry.

Note by the Secretary to Governor General's Agent and Chief Commissioner, on the report on Forest Administration of Ajmere and Mhairwarra for the half-year ending 31st March 1877.

THE Forest Department has now completed the fifth year of its establishment in Ajmere. During the first three years the scope of the operations it undertook was much more ambitious than the system since adopted. Then the chief work consisted of plantation of indigenous as well as exotic trees, while now the chief aim is to revive spontaneous natural growth of grass and scrub jungle on areas denuded of vegetation; and with this view a strict conservancy has been maintained in the tracts declared as reserves, plantation work being confined to only small patches favorably situated.

RESERVED (FOREST) TRACTS.

2. *Area, boundaries, &c.*—In Ajmere, forest tracts mean areas of waste or hilly land reserved with a view to encourage the growth of grass and scrub jungle; for, with the exception of a portion of the Todgarh Tract, the tracts contain hardly anything worth the name of forest.

3. The present area of reserved tracts, as exhibited by Form No. 45 attached hereto, is 64,360 acres, or nearly 100·5 square miles. Distributed according to the revenue circles

or tehsils, the areas reserved give a percentage of from 5 to 22·6 on the total area recorded as barren and fallow in each tehsil as shown in the following table:—

Names of Tehsils.	Area recorded in Settlement Report as barren and fallow.			Area of Reserved Forest Tracts.	Percentage on total Area.	
	Barren.	Culturable but fallow.	Total.		On total Area recorded as barren.	On the total of barren and fallow.
	Acres.	Acres.	Acres.	Acres.		
Ajmere Tehsil	111,303	107,721	219,024	11,475	10	5
Beawur "	146,234	21,301	167,535	9,650	6·6	6
Todgarh "	191,212	10,876	202,088	43,235	22·6	21
Total ...	448,749	139,898	588,647	64,360	14	11·

* Of the area of 64,360 finally demarcated, only 253 acres are of culturable land, and the cultivation unavoidably included in the forest tracts is 2,072 acres, detailed as follows:—

	A.	R.	P.
Culturable land held by proprietors ...	1,062	0	0
Fallow	177	9	0
Chahee	83	7	0
Talabee	22	6	0
Abi	101	1	0
Baranee	625	10	0
Total ...	2,072	5	0

4. The demarcation of all these tracts by permanent boundary-marks has been completed, and the boundaries of most of them have been marked on the topographical survey map of Ajmere and Mhairwarra. Sketch maps are under preparation, and will, it is hoped, be completed before long. All objections made by the neighbouring villagers have been carefully considered and satisfactorily settled.*

5. As will be perceived from the above given table, in all the three tehsils there yet remains a very large area of barren land besides the fallows for the villagers to get their grass from, should it be considered expedient to close the reserves for grazing purposes. Especially in the Ajmere tehsil, the area of cultivable land lying fallow is above a lakh of acres, and gives one acre of pasturage per head of cattle, which number 107,721. The other two tehsils do not possess this advantage, but the average of barren and fallow land available for pasturage per head of cattle is the same in all the tehsils, *viz.*, two acres. Again, the 64,000 acres of reserved tracts would, in a famine year, afford grazing for more than half the cattle of the entire district, and this in itself, as proved by the recent experience gained in the Bombay Presidency, could be an immense advantage derived from these reserves.

6. *Requirements of the population.*—Stone of all descriptions required for building purposes being abundant throughout the district, the wants of the people consist principally of fuel and fodder. At present firewood and charcoal is, for the most part, imported from beyond the district, a small portion being also obtained from the istimrardars' estates. Since the Todgarh tract, where the Beawur town obtained its charcoal and wood from, has now been closed against charcoal-burners and wood-cutters, a supply depôt will have to be maintained under the Forest Department, especially as other resources appear to have failed to fully supply its requirements. The price of charcoal rose a few months ago as high as 40 lbs. per rupee, which, if kept up, would seriously interfere with the industry of blacksmiths, of whom there is a small colony at Beawur. About 610 maunds of charcoal was therefore burnt from dry wood collected in the Todgarh tract at a cost of Rs. 85; the conveyance to Beawur, however, cost Rs. 203, and made the total of Rs. 288. Manufactured from dry wood, the charcoal must be of an inferior description; however, it sold at the rate of 35 seers per rupee. Had the charcoal been sold on the spot, probably the profits would have been much larger.

7. The landholders possessing babool and other trees grown on their fields, &c., have been making good profits by selling their cuttings, besides what they make by selling largely ooplas or chanuas, which is so much manure lost to agriculture.

8. *Protection.*—The prosecutions under the Forest Regulation are shown in statement attached hereto in Form No. 48. Of the 50 persons charged with the breach of forest rules, only 6 were accused, of which 5 were convicted, of "cutting wood," 1 person was handed up for breaking forest land for cultivation, and the rest were brought up for either grazing cattle or cutting grass without authority. In some cases attempts were made by the villagers to rescue the cattle from the forest guards, and these persons were fined heavily. These cases hardly come under the class of offences constituting a breach of forest rules; the cases fall rather under the provision of Indian Penal Code, being attempts at interfering with a public servant in the discharge of his duties. The case of bribery against the forest guards of the Shreenuggur tract, noticed in paragraph 56 of the Forest Officer's report, should not have been entered under forest offences in the statement attached to the report.

9. During the year Rs. 592-13-9 was expended on the protection of the forest tracts below named from fire: —

	Area	Rs. A. P.
Todgarh	40,063	504 10 3
Beliawas	3,172	69 15 6
Tarragarh	1,043	18 4 0
	44,278	592 13 9

10. With the exception of 50 acres in the Todgarh tract, the entire area was effectually protected from conflagrations, which, in Ajmere and Mhairwarra, are due more to carelessness than to any incendiarism. On the contrary, the villagers, as reported in the report for the first half, rendered substantial aid on the occasion of the last fire, which extended into Todgarh tract from the Marwar villages in the neighbourhood; and the arrangements at present maintained for the working of the fire lines and inspection paths appear both effective and economical. No reports have reached us of any fires during the last dry season, and probably the next half-yearly report, unlike its predecessors, will bear no record of regret at the damages caused by fires to forest tracts.

11. The protective establishment for the year consisted of 6 jemadars and 33 guards, or patrols. Of these 33 patrols, 7 were employed in the Todgarh tract, area 40,063 acres, and the remaining 26 had the watch of the remaining 24,297 acres, giving each patrol an average beat of 930 acres—not at all a heavy charge compared with the area allotted to each patrol in other provinces; but in Ajmere and Mhairwarra the patrols are made to look after the trees planted in a few favorable spots in the tracts under their charge. The entire protective establishment cost Rs. 3,480 annually, or nearly 10 pies per acre.

12. *Management and improvement.*—The natural conditions of the areas reserved admit of no elaborate plan being laid down for working operations. What is being attempted is simple conservancy, and the results have proved very encouraging—much more so than what attended the attempts at plantation. The chief work done during the year is fencing, further extended at a cost of Rs. 3,739, and maintenance of trees already planted, with a small addition here and there, which together cost Rs. 5,200, including the cost of bhistees and gardeners, &c., entertained for respectively watering and looking after the plantations detailed in Form No. 46 accompanying. The total area of plantations is 311 acres only; a small proportion of this has, however, been under plantation. The area actually planted will be given in future reports.

13. Consequent on the taking up of three more forest tracts, *viz.*, Rajaosee, Borwar, and Anspahar, the rough forecast of charges for five years ending 1879-80, prepared in 1875, has been revised, and all the estimates have been so arranged as to adhere to the limit of one lakh for five years, or an annual outlay of Rs. 20,000. An abstract statement of the charges as revised is appended hereto. From this it will be seen that, under head "Conservancy and working," the major portion of the expenditure takes place on "plantations" and "fencing." It is necessary to explain that the charges, Rs. 20,601, here shown under sub-head "plantation," are not those incurred only on the area classed as plantations; but, besides the outlay on the plantations, all expenditure connected with the maintenance of trees grown in the merely conserved forest tracts, and with the planting of trees in a few scattered places, has also been put under this head. This latter outlay should, under the revised budget rules, go under head AVIII f., "Other works," under which head at present only the fencing charges are shown. The major portion of outlay of this description has taken place under the three tracts of Tarragarh, Nagpahar, and Mhowa Bir—all in the neighbourhood of Ajmere, and where the experimental plantations were first commenced.

14. The total fencing charges estimated for the five years are Rs. 11,125; the sums provided for the years 1878-79 and 1879-80 are mostly intended for repairs, and almost all the fencing will be completed during the current year. Of the total of 3,255 chains of fencing, 2,545 have been completed up to 31st March 1877.

15. *Works of opening up the Forests.*—The time has not yet come to undertake any works of this description; however, a few paths have been constructed, and the total expenditure provided for this purpose in the five years' forecast is Rs. 656.

16. *Yield and working of the forests.*—There is no room for any remarks under this head.

A. G. CROMMELIN,

Secy. to Governor General's Agent and Chief Commr.,
Rajputana, Public Works Department

FORM No. 45.

FOREST DEPARTMENT, AJMERE.

Area of Reserved Forests in Ajmere and Mhairwarra for 1876-77.

Division or Range.	Name of Forest.	Area on 1st April 1874.	Area added during the year.	Excluded or transferred to other heads.	Total on 31st March 1875.
		Acres.	Acres.	Acres.	Acres.
Ajmere and Mhairwarra	Mhowa Bir and Mudar Hill... ...	3,052	...	240	2,812
	Nagpahar ...	2,679	...	...	2,679
	Tarragarh ...	1,043	...	...	1,043
	Shreenuggur ...	3,681	...	...	3,681
	Rajaosee ...	...	1,260	...	1,260
	Chang ...	2,341	...	...	2,341
	Sheopura ...	1,920	...	...	1,920
	Borwar and Kotra ...	...	3,923	...	3,923
	Anspahar ...	...	1,466	...	1,466
	Beliawas ...	3,172	...	...	3,172
	Todgarh ...	40,063	...	...	40,063
	Total ...	57,951	6,649	240	64,360

A. G. CROMMELIN,

Secy. to Governor General's Agent and Chief Commr., Rajputana, Public Works Department.

FORM No. 46.

FOREST DEPARTMENT, AJMERE.

Area of Plantation.

Division.	Name of Plantation.	On 1st April 1876.		During 1876-77.		On 31st March 1877.		Remarks.
		Area.	Total cost.	Area added or reduced.	Cost.	Total area.	Total cost.	
		Acres.	Rs. As. P.	Acres.	Rs. As. P.	Acres.	Rs. As. P.	
Ajmere and Mhairwarra.	Ajmere nursery ...	...	.....	1	1,467 15 4	1	1,467 15 4	
	Shahjanee " ...	11	758 14 8	...	50 0 0	11	808 14 8	This has been practically abandoned since the starting of the Ajmere nursery.
	Shikust Musjid, experimental plantation ...	27	315 15 7	...	104 4 10	27	420 4 5	
	Bibi Chilla nursery	9	63 5 5	...	17 0 0	9	80 5 5	Ditto ditto.
	Beawur " ...	32	1,695 7 5	...	671 6 4	32	2,366 13 9	
	Dilwarra and Chang	231	1,257 6 4	...	558 6 6	231	1,815 12 10	
	Total ...	310	4,091 1 5	1	2,869 1 0	311	6,960 2 5	

A. G. CROMMELIN,

Secy. to Governor General's Agent and Chief Commr., Rajputana, Public Works Department.

FORM No. 48.

FOREST DEPARTMENT, AJMERE.

Prosecutions for breaches of Forest Rules during 1876-77.

Forest Division and Civil District.	Injury to Forest by Fire.		Unauthorized felling or appropriation of Wood and minor forest produce, such as Grass, &c.		Grazing without permission in tracts in which grazing is prohibited.		Breaking land for cultivation, &c.		Total.			
									Prosecutions.		Convictions.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.
Ajmere and Mhairwarra	.....	.....	12	37	7	12	1	1	20	50	18	45
Total.	.....	.....	12	37	7	12	1	1	20	50	18	45

A. G. CROMMELIN,

Secy. to Governor General's Agent and Chief Commr.,

Rajputana, Public Works Department.

List of Forest cases tried and punishments awarded in Ajmere during 1876-77.

Number.	Number of persons accused.	Locality where the offence is stated to have been committed.	Nature and description of offence.	Sentence.	Remarks.
1	...	Chang tract	Grazing cattle ...	Fine of Rs. 27.	
2	4	Ditto	Releasing cattle ...		
3	3	Nagpahar	tto ...	" " 30.	
4	13	Tarragarh	Cutting grass ...	11 fined 4 annas each, and 2 acquitted.	
5	2	Ditto	Ditto ...	Fine of Rs. 2.	
6	2	Nagpahar	Ditto ...	Acquitted.	
7	2	Shreenuggur ...	Grazing cattle ...	Fine of Rs. 15.	
8	...	Chang	Ditto ...	" " 36.	
9	2	Ditto	Releasing cattle ...		
10	1	Nurchashma... ...	Cutting grass ...	" " 2.	
11	6	Shreenuggur... ...	Ditto ...	" " 2-8.	
12	1	Barinal	Cutting wood ...	" Re. 1.	
13	5	Shreenuggur... .	Cutting grass ...	" Rs. 8-4.	
14	1	Chang	Breaking land for cultivation ...	" " 5.	
15	3	Ditto	Cutting wood ...	" " 3.	
16	1	Hattun	Ditto ...	" " 10.	
17	1	Biliawas	Ditto ...	Acquitted.	
18	1	Todgarh	Ditto ...	Fine of Rs. 5.	
19	1	Ditto	Ditto ...	" " 15.	
20	1	Mudar Hill	Grazing cattle ...	" Re. 1.	
21	4*	Shreenuggur ...	Bribe ...	Acquitted.	* Forest patrols.

A. G. CROMMELIN,

Secy. to Governor General's Agent and Chief Commr.,

Rajputana, Public Works Department.

Abstract statement of the proposed Forest Expenditure for the five years ending 1879-80.

Budget Heads.	Actuals for 1875-76.	Actuals for 1876-77.	Total Actuals.	Sanctioned for 1877-78.	Proposed for 1878-79.	Proposed for 1879-80.	Total for the five years.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
A.—Conservancy and Working—							
I.—*b.* Cost of preparing charcoal, &c. / II.—On Timber, &c., removed by purchasers	58	64	122	400	...	...	522
VI.—*a* and *b.* Purchase and feed of cattle ...	148	23	171	95	95	123	484
VI.—*c.* Plants, tools, instruments ...	221	183	404	168	117	71	760
VII.—*a.* Roads and bridges	446	121	567	25	64	...	656
b. Buildings	959	514	1,473	735	335	185	2,728
VIII.—*a.* Demarcation	2,014	320	2,334	10	50	40	2,434
b. Compensation for land... ...	...	46	46	...	...	...	46
c. Surveys and working-plans ..	154	605	759	...	...	...	759
d. Plantation	4,930	5,200	10,130	4,182	3,033	3,256	20,601
e. Protection from fire	680	593	1,273	610	430	455	2,768
f. Other works, including fencing and extension of natural growth ...	2,836	3,739	6,575	2,575	1,163	814	11,127
X.—Miscellaneous	517	20	537*	...	...	...	537
Total A ...	12,963	11,428	24,391	8,800	5,287	4,944	43,422
B.—Establishment salaries—							
Superior officers	7,100	4,500	11,600	1,800	3,150†	3,800†	20,350
Subordinate or protective establishment ...	3,108	3,062	6,170	3,478	3,444	3,478	16,570
Office establishment	1,788	1,686	3,474	1,740	1,740	1,740	8,694
Travelling allowances	1,470	1,140	2,610	765	1,215	765	5,355
Contingencies	917	642	1,559	417	417	417	2,810
Total B ...	14,383	11,030	25,413	8,200	9,966	10,200	53,779
GRAND TOTAL ...	27,346	22,458	49,804	17,000	15,253	15,144	97,201

* Includes Rs. 500 granted to Nasirabad Cantonment Committee for Nasirabad plantation.

† Including an Assistant Conservator's pay for three months.

Mount Aboo,
The 26th July 1877.

A. G. CROMMELIN,
Secy. to Governor General's Agent and Chief Commr., Rajputana, Public Works Department.

No. 61, dated Ajmere, 31st May 1877.

From—The Deputy Commissioner in charge of Forest Office, Ajmere and Mhairwarra,

To—The Commissioner of Ajmere and Mhairwarra.

I have the honour to submit the half-yearly report ending 31st March 1877, along with the annual accounts and statements ordered in paragraph 5 of Government of India No. 198, dated 19th February 1875.

Summary of the last six months.

2. During the last six months the time of the Sub-Assistant Conservator of Forests has been occupied on the following works:—

1st.—Final demarcation of the Rajaosee, Borwar, and Anspahar forest tracts.

2nd.—Completion of the well at the Ajmere main nursery.

3rd.—Construction, repairs, and inspection of fences and boundary pillars of the various tracts.

4th.—The maintenance of trees planted, and the general supervision of the forest tracts.

5th.—Clearance of the fire lines at the Barakhan and Biliawas tracts, Mhairwarra district, and Tarragarh valleys, Ajmere; also clearance of the inspection paths.

Detail of works in each tract.

3. *Chang Tract.*—Sixty-two chains of the old fences have been repaired and earth thrown on the top, so as to make them more compact. The inspection path running from one end to the other of the tract, which measures 160 chains, have been repaired and put in order. A number of blank spaces had been sown during the last rains with a mixture of babul, jhand, dhak, and other seeds which had germinated freely, but now only half of them remain, owing to the want of moisture. About 100 trees of sorts were planted in pits, out of which only 60 are in a flourishing condition, and the rest have died, due principally to the bad quality of the soil.

This tract has amply repaid the cost of conservation; it is in a most satisfactory condition, and will be most valuable in case of a scarcity of grass or fodder in future years.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

4. The expenditure on this tract during the year has been Rs. 884-2-7, against Rs. 765-13-10 during 1875-76. The important work, such as fencing, demarcation, &c., have all been completed, and the expenditure decreases in future years. Rs. 69-10-11 were realized on account of fines from prosecutions and establishment.

This tract has at present but little to shew; it was close shaven when taken over, and its restoration will be a work of years.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

5. *Hattun or Sheopura Tract.*—The fences and nadis constructed previous to 30th September last have been repaired. Nearly half of the plants germinated from seeds sown during last rains are in a flourishing condition; half the trees planted have died; these will be replaced during the next rains by broadcast sowings.

6. The expenditure on this tract has been Rs. 1,542-8-3 during 1876-77, and the revenue Rs. 30, from fines only.

The wood here is not very valuable, but it has shewn good effects from steady conservation. I visited this tract, and was satisfied with the results during this half-year.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

7. *Biliawas Tract.*—The fire lines constructed during the year 1875-76 were cleared and burnt at a cost of Rs. 69-15-6. The cost on this account during last year amounted to Rs. 85. The decrease in the expenditure is due to the fire lines having been constructed in the same place as last year. The nadis and boundary pillars are in good order, and the establishment has given satisfaction. The expenditure during the year has been Rs. 519-12-6, against Rs. 786-11-11 during the year 1875-76. The decrease is on account of the demarcation having been completed during the year 1875-76. The revenue has been Rs. 17-14 on account of fines only.

I also visited this tract in this half-year. It is the most thickly wooded of all our reserves, and much good has resulted from the strict conservation we have enforced.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

8. *Todgarh Tract.*—Feet 9,828 $\times 2\frac{1}{2} \times 2 = 49,140$ cubic feet of rubble masonry fences have been added to the fences already constructed. An inspection path has also been constructed, measuring 52 chains long and 6 feet wide. The usual fire lines, measuring 1,522 chains long and 85 feet broad, were cleared and burnt along the Marwar boundary at a cost of Rs. 408-10-3. The total cost of fire protection during the year has been Rs. 504-10-3, out of which Rs. 96 was paid to temporary watchers entertained during the hot months, and Rs. 408-10-3 was the cost of clearing and burning fire lines.

If there is no "exploitation," I fail to see the necessity of building all these paths.

J. H. LASSALLE.

9. Several paths 60 feet wide were cleared to and from Marwar territory; also 468 chains of the inspection path were repaired.

10. Fires have successfully been excluded by clearing broad lines several miles in length, and by maintaining an extra establishment of chokidars to patrol this tract in the hot season. Prior to this arrangement, this reserve was very subject to conflagrations, and one or two fires used to occur every year, generally through the carelessness of travellers.

11. Early arrangements were made to protect the young trees from frost throughout the districts, but the unexpected frost which fell after the removal of the shades destroyed some seedlings in the Sheopura tract—about one-fifth of last year's sowings.

12. About 610 maunds of charcoal were manufactured at the Todgarh tract. The transaction stands thus:—

This was principally made from trees felled for fire-lines; it was an experiment, but has been carried out on a costly plan. It would be better to sell the wood in future, or to sell it on the spot, rather than pay for its carriage.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

	Rs.
Cost of manufacturing	85
Carriage to Beawur	203
Total ...	288
Probable value of the charcoal at 25 seers ...	697
Probable net profit ...	409

Out of the 610 maunds of charcoal, $118\frac{5}{40}$ maunds have already been sold for Rs. 135. The remaining quantity is in stock, and will soon be disposed of at the best rate obtainable.

13. Out of the estimated cost of Rs. 288, a sum of Rs. 50 has been paid out of the year's allotment, and the balance will be paid out of the allotment for the year 1877-78. The sum of Rs. 135, sale of charcoal, has not yet been received, and will therefore be credited in the account for 1877-78.

14. Strict orders have been given that no live wood of any kind shall be used in making charcoal, and the manufacture will not be allowed to go beyond very moderate limits.

Some green wood is, I believe, necessary to make good charcoal. Charcoal-burners, as a rule, make all their charcoal with green wood, but then we do not pretend to be charcoal-burners.
J. H. LASSALLE.

15. The nadis, demarcation lines, and boundary-pillars are in good order.

16. The expenditure on this tract has been Rs. 2,084-7 during 1876-77, and during 1875-76 Rs. 3,250. The decrease is due to the demarcation having been completed during the last year; also decrease in the construction of fire-lines, &c.

17. The revenue has been as follows:—

	Rs.	A.	P.
Sale of charcoal	61	5	4
Sale of honey	42	7	5
Fines	30	5	9

The charcoal sold was manufactured during last year, and the cost was defrayed and adjusted in the accounts for 1875-76.

18. *Mhowa Bir and Mudar Hill.*—Eighty-two chains of rubble masonry fences 2½ × 2 feet, also 75 chains of *thor* planting in double line fences, have been constructed, and 63 chains of old *thor* fence have been repaired. The trees planted in former years are in a flourishing condition. Nearly half of the sowings has been successful. The expenditure on this tract has been Rs. 1,218, detailed in the statement attached. The revenue credited to Forest Funds has been Rs. 26-4-6, realised from sale of wood and fines. The grass in the part belonging to the Nazul Fund was sold for Rs. 350, and the amount has been credited as usual to the Nazul Fund.

This includes Rs. 598-7-1, or nearly half the whole expenditure for fencing.
L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

19. *Shikust Musjid Tract.*—The trees formerly planted in this tract are doing well. The expenditure during 1875-76 amounted to Rs. 113-12-7, and during the year 1876-77 to Rs. 104-4-10. It was proposed to limit the future expenditure to Rs. 70 per annum, thus,—

	Rs.
1 Chokidar at Rs. 5	60
Contingencies	10
Total ...	70

A small tract which ought not to employ more than one man.
L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

But the Sub-Assistant Conservator of Forests reports that the pay will not be sufficient, as the work has not been decreased. A sum of Rs. 17-8 was realised as fees for quarrying at this tract.

20. *Bibi Chilla and Shahjanee gardens.*—These gardens were formerly utilised as nurseries, but since the starting of the main forest nursery in the Ajmere district these have been practically abandoned. The expenditure during 1876-77 has been Rs. 17 and Rs. 50 respectively. It is probable that the District Fund will sell both these gardens.

21. *Beawur nursery.*—An earthen embankment, measuring 425 feet long and 3 feet high, has been constructed, with a ditch all along its foot; 433 feet of *thor* fence have been completed, and three chains of the old earthen embankment put into repair.

22. The trees formerly planted in the plantation attached to this nursery are in good condition, and 270 pits have been dug for planting out during the rains. The trees will be watered by the bhistie at present employed, and no extra expenditure will be incurred.

23. It is proposed to irrigate this nursery by tank water in future. At present the nursery is dependent on the working of wells, and an establishment of malis has been maintained for the purpose. If, however, the irrigation be carried out from the tank, there will result a considerable saving in the present charges.

This should be irrigated from Balad if possible, water from which tank comes close up to the garden.
L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

Unfortunately last season the Jalea tank did not fill; if it had filled, this land could have been irrigated. Until it does fill, the present establishment will have to be maintained.

24. The trees in the nursery are in a flourishing state and ready to be planted out. The frost did not affect the trees in the nursery, as they were growing under the shade of castor-oil plants. The expenditure during 1876-77 has been Rs. 671, while the revenue amounted to Rs. 99, realised from sale of crops, vegetables, and from fines.

25. *Dilwarra and Chang Birs.*—Forty-three chains of *thor* fence have been added to the fence constructed previously, and 258 chains of old fence have been repaired.

26. Some of the trees planted during last rains died, which will be replaced by others during the ensuing rains. The height of the trees in good condition varies from 2½ to 3½ feet. These trees may have to be watered for the next three years, after which they will do for themselves. A number of pits has been dug for planting during the next rains. A quantity

of seed was sown during the last rains, which germinated freely, but now only half of the seedlings are in a flourishing state. The topographical survey of this and all other forest tracts in Ajmere and Mhairwarra has been completed. The expenditure during the year has been Rs. 558 against Rs. 1,058 during 1875-76. The decrease is accounted for by the fact that the fencing and demarcation were completed during the last year. The revenue has been Rs. 85, realised from the sale of grass.

Watr from Balad tank has been obtained during the months of April and May for the more valuable trees planted in pits in the Dilwarra Bir. The consequence will be a probable future saving on watering establishment; the trees will come to maturity all the sooner, and the grass crop will probably yield a larger income next year.

This is satisfactory, and even after paying water-rate, the saving and improvement should be great.

L. S. SAUNDERS,
Commissioner of Ajmere.

6th June 1877.

27. *Nagpahar Tract.*—Nine chains long, three feet high, and two feet broad rubble masonry fences have been constructed, and 10 chains of *thor* fence, in double lines, have been completed in the parts most subject to inroads of cattle. The roofing of patrol's hut at Hathikhera has been completed.

28. The villagers of Hathikhera and Kotra, and "Telis" of Ajmere, were allowed to exercise the privilege of cutting grass during the season. In accordance with the arrangements made by the Settlement Officer, in the 1,682 bighas taken up in Hathikhera and Kotra, the inhabitants of these villages have the right to cut the grass during the first two days after the *Dasera*, and afterwards in common with the Telis of Ajmere, always provided the forest officer has not closed any portion for reproduction under section 5 of the Forest Regulation.

A quantity of seed was sown near Hathikhera during last rains, and the seedlings were in a flourishing condition when the last half-yearly report was submitted, but now only one-fourth of the number are alive. Out of the trees planted during last rains, about half of the jâmun trees are dead. Some of the trees planted during former years will do without water after the next two years, and some will have to be watered for the next three years.

29. The expenditure at this tract has been Rs. 1,308 during the year, against Rs. 2,118 during last year. The decrease is due principally to the completion of demarcation during last year, limited planting operations, and consequent reduction in the watering establishment, also reduction in the protective establishment. The revenue realised from this tract during the year amounts to Rs. 67-13-5 from fines and sale of dry wood. The grass was sold for Rs. 585, and the amount was, as usual, credited to the Nazul Fund.

After two more years there will be a considerable reduction in charges here.

L. S. SAUNDERS,
Commissioner of Ajmere.

6th June 1877.

30. *Tarragarh Valleys.*—The usual fire-lines, measuring 74 chains in length and 45 feet in breadth, were cleared and burnt at a cost of Rs. 18-4. In consequence of the fire-lines being constructed in the same place, the cost decreases from year to year. The inspection path, measuring 150 chains long and three feet broad, has also been put into repair.

31. The grass-cutting privilege was exercised, as usual, by the neighbouring villagers for six weeks after the *Desera*, and the arrangement appears to satisfy all parties. The grass remaining after the expiration of six weeks was, along with some dry wood, sold for Rs. 141. The trees planted are in a flourishing state, and are being watered.

32. About 70 Bombay mango grafts were planted in this tract during the rains of 1874, but now only 27 trees remain, and the rest are dead, the climate of Ajmere appearing to be unfavorable. Out of the 27 trees, 21 are in a flourishing state, one is sickly, and the rest have grown to a height unusual with grafts already.

33. The expenditure during the year has been Rs. 836-15-11 against Rs. 1,449-3-11 during 1875-76. The decrease is due to the fencing, demarcation, and the construction of a small nursery having been completed during the last year. The revenue during the year amounts to about Rs. 195, realised from sale of grass, dry wood, and fines.

This will prove a good property, I think, hereafter; and if the mangoes flourish in two years, they should bring in a fair revenue.

L. S. SAUNDERS,
Commissioner of Ajmere.

6th June 1877.

34. *Shreenuggur Tract.*—Eighty-one chains 2½ × 2 of stone fences and 97 chains of *thor* fences have, respectively, been constructed and repaired. A number of trees were planted during last rains, which are, with the exception of seven mango trees, doing well. One bhistie is maintained for their watering. The seedlings are doing well wherever the moisture is fairly constant.

35. The expenditure during the year has amounted to Rs. 1,859, and the revenue Rs. 18 only, on account of fines.

36. *Borwar, Rajaosee, and Anspahar Tracts.*—The taking up of these tracts has been sanctioned by the Chief Commissioner, and the necessary declaration published in *Rajputana Official Gazette*, dated the 9th December 1876.

37. In accordance with the terms contained in section 3 of the Forest Regulation, copies of the declaration in Hindi, together with a written explanation in Hindi of the terms on which

the land has been taken up by the Government, have been delivered to the lambardars of the villages concerned.

38. The possession of the above tracts has been acquired, the protective establishment has been entertained, and the final demarcation completed.

39. *Borwar Tract.*—The boundary lines of this tract were laid out by Mr. Moir by means of 54 slabs. In order to place the boundary-pillars within easy sight of each other, two intermediate pillars have been added, and the final demarcation completed in the following manner :—

Thirteen pillars of lime masonry and 43 of rubble masonry, with a slab stone in the centre, all bearing serial numbers.

40. A considerable portion of this tract was partially conserved by the late Colonel Dixon, solely for the sake of the grass, and not for the timber it might have produced. The grass preserve was, after Colonel Dixon's death, abandoned. During and previous to the late famine, great quantities of wood were cut down by the zemindars of the neighbouring villages and sold in Marwar, at Nyanagar, Ajmere, Nasirabad, and elsewhere. The tract is now almost denuded of wood, and the grass is not nearly so plentiful as it used to be.

I visited this tract in company with Captain Lassalle and the Sub-Assistant Conservator; heard the complaints at our taking it up; had the cattle counted, and found that ample grazing-land was still left to the zemindars. This tract is now of little value; but I have every hope that at the end of ten years' strict conservation the place will look quite a different sight to the bare rocks we now meet with.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

41. In order to reboise this tract, it is proposed to conserve it strictly for some years, and to carry on sowing operations on a small scale. A rough working plan and an estimate amounting to Rs. 1,402 have been sanctioned for expenditure from 1st September 1876 to 31st March 1880.

42. *Grazing land.*—The grazing-land left in this tract is about eight bighas per head of cattle, which is amply sufficient. I have the honour to call your attention to my letter No. 516, dated 1st March 1877.

43. The expenditure on this tract during the year has been Rs. 135 on account of demarcation, cost of tools, and pay of establishment.

44. *Anspahar Tract.*—Nine pucka or lime masonry and 27 rubble masonry boundary-pillars have been constructed on the same principle as those of the Borwar tract.

45. This tract is fairly well covered with jungle, but a good deal of damage seems to have been done within the last few years by fire and charcoal-burners. The neighbouring villages have ample grazing-ground, and the tract, being hilly, is not very suitable for grazing purposes, and therefore all the more suitable for forest conservancy.

This tract I also visited, and I consider there is every hope of its being covered with scrub jungle in the next five years.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

46. It is proposed to confine the operations on this tract to strict preservation of the natural growth, and to sowing operations on a small scale for some years to come. A working plan and an estimate amounting to Rs. 1,278 have been sanctioned up to 31st March 1880. The expenditure on this tract has been Rs. 65, as detailed in the statement attached.

47. *Rajaosee Tract.*—The final demarcation of this tract has been completed by means of 47 boundary-pillars, consisting of rubble masonry, with a slab in the centre bearing serial numbers.

48. This tract was formerly conserved for the purpose of supplying grass for the station of Nasirabad, but was afterwards given up, and now little remains except barren hill-sides, with a few *thor* bushes and scrub on parts the most inaccessible to cattle.

This is at present a poor and useless tract, but there is said to be hope in the future of a good supply of grass when the scrub jungle is allowed to grow.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

49. In order to reboise this tract it is therefore intended to prohibit the grass-cutting in this tract for several years. It does not produce any grass at present, and by allowing the grass to grow up, seed, and wither down, a plentiful crop will soon be produced, and at the same time shelter afforded to young shoots and seedlings, and the soil prepared for sowing operations. It is also intended to undertake sowing and planting operations on a small scale. Sufficient amount of grazing-land has been left for the cattle of the villages concerned.

50. A sum of Rs. 82 has been spent on account of demarcation and pay of establishment.

51. *Ajmere Nursery.*—There is nothing particular to report on this nursery, beyond the fact that the young trees are in a flourishing state. Owing to hard rock having been found, the cost of digging the well has been more than double the amount estimated, and the cost of the construction of the nursery has, therefore, been Rs. 1,468 against the estimated expenditure of Rs: 960.

52. *General.*—The expenditure under this head amounts to Rs. 9,282 as detailed in the annexed statement, out of which Rs. 606 was paid to amins for surveying certain forest tracts and preparing maps and khasras, which leaves Rs. 8,676, ordinary expenditure, against Rs. 12,230

in 1875-76. The decrease in the expenditure is due to the transfer of the Assistant Conservator and reduction in the protective establishment. The revenue realised under this heading amounts to Rs. 140 from sale of old tools, bullocks, fines, &c.

53. *Circular road planting.*—The trees planted on this road during the rains of 1875 are all in a flourishing state. The cost of their maintenance has been Rs. 83 during 1876-77. The trees are not yet high enough, and will still have to be watered for a year or two, and one bhistie has been employed for the purpose.

This roadside planting is not a charge on the Imperial revenues: the Sub-Assistant Conservator simply supervises for the District Committee, who pay all expenses.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

54. The trees planted on the Shreenuggur, Pokar, and Jawaja roads have been maintained during the year at a cost of Rs. 958. A sum of Rs. 264 is available for their maintenance up to 31st July, the commencement of the rains, after which they are expected to do for themselves; but the Sub-Assistant Conservator of Forests reports that some of them will have to be watered for the next two years at a cost of Rs. 500 or Rs. 600. The Sub-Assistant Conservator has been directed to submit a detailed report on this subject, with an estimate, which will be forwarded to the District Committee for consideration and orders.

55. *Establishment.*—In Sub-Assistant Conservator Mahomed Anwar Khan, I believe, I may safely place very considerable confidence. He is quiet, good-tempered, and sensible, and he understands that it is his first duty to be out in the jungles at all seasons of the year. The office clerk, Ranchand Mehta, is intelligent and industrious.

56. *Forest prosecutions.*—A list of cases tried under the Forest Bye-laws and others connected with forest affairs will be found at the end of this report.

Out of the twenty-one cases which occurred during the year, ten were referred to in last half-yearly report: out of the remaining eleven cases, conviction has been obtained in nine, and two were dismissed.

This is by no means excessive, and shows that the people have not been unnecessarily harassed.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

57. During the last half-year the patrols of the Shreenuggur tract were charged with bribery, and were tried in the Extra Assistant Commissioner's Court. The case was dismissed for want of proof, and the patrols have since been ordered to receive full pay while under suspension, and to be reinstated under orders received from the Commissioner.

There has been reason to suppose that this was a false charge, got up because the tract had been lately taken up.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

58. *Financial results.*—The usual statements and accounts ordered by the Government of India are appended, which consist of annual summary of receipts and charges, annual account current, and detailed statement of charges incurred on each reserve, plantation, or nursery.

59. *Annual summary of revenue and expenditure.*—From the accompanying statement it will be seen that the total expenditure under A and B during the year has amounted to Rs. 22,458-2-3, which gives a decrease of Rs. 4,887-15-7 from last year's expenditure.

60. The sanctioned budget allotment for the year was Rs. 24,000, so that an actual saving of Rs. 1,541-13-9 has therefore been effected, due principally to the exercise of strict economy.

This is satisfactory.

L. S. SAUNDERS,
Commissioner of Ajmere.
6th June 1877.

61. The estimated amount on account of receipts was Rs. 500, and the actual revenue has been Rs. 905-0-4.

62. *Total expenditure and revenue during 1876-77.*—The accompanying statement A shows the total expenditure incurred for forest purposes, including district nazul, &c., also the total revenue realised from all sources during the year.

63. The revenue realised is very small, owing to the fact that the mango crop altogether failed, which caused considerable loss to the District Fund.

64. *Detailed statement of charges.*—The statement has been drawn up in the same form as last year, and an abstract has been added, which shows in one sheet the total expenditure incurred on each forest reserve, experimental plantation, and nursery up to the end of 1876-77.

65. *Scarcity of timber in the Ajmere District.*—Owing to the extensive public works going on, the demand for timber, firewood, and charcoal seems to be on the increase. During the last six months a call was received from the Public Works Department for the supply of charcoal, and it is probable that more calls will be received during the next year. About 600 maunds of charcoal were experimentally manufactured in the Todgarh Forest tract. The detail of cost and revenue is given in paragraph 12.

66. The tract near Todgarh contains about 10,000 acres of unfelled jungle, and the supply can be met without any damage to the jungle: only dead wood will be devoted to the purpose. The rate of charcoal at Nasirabad was about 29 seers per rupee during 1876-77; and from the detail of the cost of the charcoal, it will appear that, even if the produce be carried to Nasirabad, it will bring in a considerable revenue.

67. *Carob seeds.*—Twenty seeds were sown as an experiment in each of the Beawur and Mirsha Ally nurseries, and they germinated. Only four plants appear in a healthy condition at

Beawur, and the rest have died, which the Sub-Assistant Conservator attributes to the seeds being not well seasoned. The healthy plants are yet in flower-pots. Out of the twenty seeds sown at Mirsha Ally, only seven are healthy, two weak, and the rest died a few weeks after their germination. Some few more carob seeds will be sown before the rains, and results reported next year.

68. Four hundred and seventy-four trees of sorts were given gratis to the Executive Engineer, Mhairwarra Irrigation Division, Mayo College, and Rev. J. Gray.

No. 69, dated 7th June 1877.

Memo. by—L. S. SAUNDERS, Esq., *Commissioner of Ajmere.*

THE report is herewith forwarded, in original, to Secretary, Public Works Department, for Chief Commissioner's information. Forest matters have prospered at an economical rate, and I think we have much reason to be satisfied with the result of this experiment. The full advantages will not be known till a scarcity or famine arises. The people are gradually becoming more reconciled to the acquisition of their land, and we have endeavoured to carry them with us, by liberally providing for their requirements, both in wood and grass, whenever possible.

Detailed Report on each Forest Tract in Ajmere and Mhairwarra, by E. McA. MOIR, Esq., *Assistant Conservator of Forests.*

CHANG TRACT, MHAIRWARRA DISTRICT.

1. *Area.*—The area of this tract, as finally taken up under the Forest Regulation, excluding all cultivation, amounts to 2,341 acres.

2. *Description of boundaries, &c.*—The boundaries of this tract have been demarcated by means of 28 masonry boundary-pillars; also by stone walls and earthen embankments and ditches at certain places.

3. The pillars all bear serial numbers in large red figures, and where no fences exist a straight line has been cut through the low jungle, from 10 to 15 feet in width, from pillar to pillar, which also serves as an inspection path.

4. No. 1 pillar is placed near the well called Punna Baoree, about half a mile from the village of Chang. The line then passes over the hill above the village of Chang, and descends the face of the hill, and proceeds towards Umurpura.

5. On reaching the base of the hill, boundary-pillar No. 8, the line encounters the stone fence, and proceeds along the foot till it arrives opposite the village of Subulpura, where an earthen embankment and ditch forms the boundary as far as the village of Sendra.

6. At this point the line of boundary-pillars again commences, and, after passing the villages of Manpura, Kanpura, and Cheetar, terminates at boundary-pillar No. 28, from which point there is a continuous stone fence or earthen embankment with ditch back to boundary-pillar No. 1 at Punna Baoree.

7. *General description of the tract.*—This tract occupies the range of hills stretching from a point near the village of Chang along the side of the Bur pass road to a point near the village of Sendra. The length of this tract is about 4½ miles, and the average breadth about 1 mile.

8. Some of these hills rise to an elevation of 600 to 800 feet above the surrounding plains, and the slopes are generally abrupt, especially on the eastern side.

9. Numerous streams take their rise in these hills, and flow into some important tanks situated in the neighbouring plain.

10. The geological formation of this tract is principally composed of a rough kind of granite, also quartz rocks, mica schists, &c.

11. On the steep slopes of the hill range there is very little soil, but on the western side, where the slopes become less abrupt, there is a fair depth of soil, but of a very inferior description.

12. The whole of this tract is fairly covered with trees and bushes of various kinds, most of which have sprung up since the tract has been conserved. The principal trees are dhao (*Conocarpus latifolia* and *Pendula*), ber (*Zizyphus jujuba*), kair, dak (*Butea frondoza*), also kumpta, neem, babul, orinj, &c., with *Euphorbia* and dasra bushes on the rocky places.

13. There is a patch of jungle situated in the centre of the tract above the village of Chang, which has escaped the general destruction, on account of its being the abode of a much venerated "fakir." There is a spring of water in the middle of this grove, and the trees are from 20 to 30 feet in height, which shows what the greater part of this jungle must have been at one time.

14. *Village rights.*—The village rights in this forest tract, defined in Section IV of the Forest Regulation for Ajmere and Mhairwarra, are vested on the following villages: Chang, Umurpura, Sendra Kurantia, Manpura, Kanpura, and Subulpura.

15. *Habitation, temples, &c.*—No hamlets or habitations of any kind are included within the boundaries of this tract, with the exception of a temple and cave, situated above the village of Chang, where a fakir has resided for many years.

16. There is one drinking-place called Semla Deh, situated near the boundary of the tract, where the neighbouring villagers have been in the habit of watering their cattle during the hot weather. Last season there was a scarcity of water outside the tract, and permission was granted to the villagers of Manpura and Kanpura to water their cattle at this place from the 17th April 1876 up to the commencement of the rains. This privilege should be annually granted in the case of necessity arising.

17. *Paths.*—There are three paths passing through this tract, one from the village of Cheetar to Umurpura, another from Kanpura to Sendra, and another from Chang to the village of Umurpura, which are only used for foot passengers; and there appears to be no necessity for stopping these ways, provided no serious damage is done to the neighbouring jungle by carrying fire, &c.

18. *Patches of cultivation.*—A few patches of cultivation have been included within the boundaries of this tract, comprising a total area of about 73 acres, a list of the proprietors of which will be found at the end of this report.

19. It was at first proposed to acquire possession of these patches under the Land Acquisition Act, but it has now been decided not to do so, and final orders on the subject are contained in Secretary to Chief Commissioner's No. 1237S., dated 19th May 1876.

20. *Proportional share of revenue, Forest Regulation, Section VI, and Forest Bye-law No. XI.*—A statement showing the proportion in which the revenue from this tract, if any, will be divisible among the villages concerned in accordance with the above rules will be found attached.

21. *Maps of forest tract.*—A large map of this tract, scale 4 chains=1 inch, was supplied by the Settlement Department, showing all patches of cultivation, &c., from which a small map, scale 32 chains=1 inch, has been drawn. The boundaries of this tract have also been entered on the Topographical Survey maps of the Mhairwarra District.

22. *Working plan of operations.*—A rough working plan, showing the general march of operations up to April 1880, has been drawn up, and sanctioned by the Chief Commissioner. These operations consist simply in strict conservancy, fencing, thinning, and broadcast sowing.

Sheopura and Huttun Tract, Mhairwarra District.

23. *Area.*—The area of this tract, excluding all cultivation, is 1,920 acres.

24. *Description of boundaries, &c.*—The boundaries of this tract are unmistakably demarcated by means of 40 boundary-pillars, also by stone fences between the pillars in all parts, subject to the inroads of cattle. Boundary-pillar No. 1 is placed near the Beawur and Mussuda road, above the village of Rajor, No. 16, opposite the village of Umerbaoree, and No. 28 brings the line to the end of the tract near Shekhawas.

25. From this point the line proceeds towards the village of Huttun, opposite which boundary-pillar No. 30 is placed, after which there is a continuous line of boundary-pillars and stone fences back to boundary-pillar No. 40, situated near the point of departure on the Beawar and Sheopura road.

26. The boundary-pillars are of lime masonry, and situated within sight of each other. The fences are of rubble stone, with a layer of earth on the top, which style of fence has been found the cheapest and most durable in this district, there being no lack of stones at hand.

27. *General description of the tract.*—This tract occupies an elevated plateau, intersected by a low range of hills, from which the water flows into numerous tanks both in the Mhairwarra and Mussuda districts.

28. This tract is surrounded on all sides by British territory, the total length being about 4½ miles, and average breadth about ¾ mile.

29. The geological formation of this tract consists of quartz rocks, mica schists, limestones, and a kind of hard sandstone. There is very little soil on any of the slopes, and the whole tract may be said to be of a very barren description.

30. The whole area may be called hilly waste land, there being only about 66 acres of cultivation within the boundaries, which are so scattered over the tract, that it was found impossible to exclude them.

31. *Trees, bushes, &c.*—Most parts of this tract were fairly covered with trees and bushes when first taken up, but the vegetation, owing to the barren nature of the soil, is still of a very stunted description. In addition to the trees and bushes named in paragraph 12, may be mentioned the salur tree (*Boswellia theripera*).

32. *Village rights.*—The village rights in this tract, *viz.*, grass and wood-cutting, a right to use ways, &c., are vested on the following village communities: Rajor, Umurbaoree, Shekhawas, Huttun, and Borwar, whose lands are included within the boundaries of the tract.

33. *Habitations, temples.*—There is one small hamlet, called "Jaita-ka-Baria," consisting of one house included within the boundaries of this tract.

34. A few patches of cultivation surround this hamlet, with one or two wells attached, and permission has been granted to the cultivator, in accordance with Forest Bye-law No. XII C, to graze six head of cattle required for the cultivation in the neighbouring jungle.

35. Two uninhabited temples are situated within the limits of this tract at the old ruined villages of Rajor and Borwar, where the neighbouring villagers sometimes come to do *pooja*.

36. *Drinking-places, wells, &c.*—There is one drinking-place only situated within the boundaries of this tract called Burra Negona, sometimes used by the neighbouring villagers for watering their cattle during the hot weather.

37. In case of scarcity of water arising outside the forest limits, the villagers will, of course, be permitted to water their cattle at this place, and immediately afterwards drive them out of the jungle by the shortest road.

38. *Paths.*—The seven paths marginally noted traverse this tract, five of which are used for foot passengers only.

1. Sheopura to Borwar.
2. Borwar to Keri Kera.
3. „ to Umurbaoree.
4. „ to Rajor.
5. Huttun to Shekhawas.
6. „ to Umurbaoree.
7. „ to Rajoor-ka-Nulla.

39. No. 5 is used for the passage of camels, horses, &c., and as long as no harm is done, should not be interfered with.

40. No. 7 is used for driving cattle from the village of Huttun to a watering-place situated on the other side of the forest tract; and as there is another path which might be used without much inconvenience, this road might be closed, if the necessity arises.

41. *Cultivation.*—A list of the patches of cultivation unavoidably included within the limits of this tract, with names of proprietors, &c., will be found attached.

42. *Proportional share of revenue, &c.*—A statement is attached showing the proportion in which the revenue from this tract will be divisible amongst the parties concerned in accordance with the sanctioned rules.

43. *Maps of forest tract.*—A large map of this tract, scale 4 chains=1 inch, has been furnished by the Settlement Department, which shows the boundaries, details of cultivation, paths, nullas, &c., from which a small map, scale 32 chains=1 inch, has been drawn. The boundaries have also been entered on the topographical survey maps of the Mhairwarra district.

44. *Working plan of operations.*—In the same manner as for the Chang tract, a rough working plan has been prepared and duly sanctioned by the Chief Commissioner for the five years ending 31st March 1880.

Beliawas and Tarragarh Tract, Mhairwarra District.

45. The area of this tract, excluding all cultivation, is 3,172 acres according to the settlement records.

46. *Description of boundaries, &c.*—This tract is bounded on the east side by the Meywar territory, belonging at this point to the Thakur of Bednor. The tract has therefore only been demarcated by the Forest Department on the Mhairwarra side.

47. There are 62 boundary-pillars in all, 26 of which are *pucka* masonry and 36 are of rubble masonry, with stone slab in centre, and all bear serial numbers painted on the slabs or pillars.

48. No. 1 boundary-pillar is placed near the Kukra boundary at the south end of the tract, from which point the line passes along the ridge of a low range of hills; and, after avoiding the hamlet called "Himta-ka-Barria," arrives opposite the village of Soniana, boundary-pillar No. 33.

49. From this point the line proceeds towards the village of Beliawas, and joins on to the Bednor boundary at boundary-pillar No. 62.

50. A straight line has been cut through the jungle from one boundary-pillar to the other, which also serves as an inspection path, and, if kept clean of jungle, will also serve as a fire line.

51. *General description of the tract.*—This tract occupies the range of hills stretching along the Meywar boundary, from the village of Beliawas to the boundary of the village of Kukra. The total length is about 5 miles, and the average breadth 3½ miles.

52. The physical features of this tract much resemble the two former, with the exception that the hills are much higher and better clothed with wood.

53. The drainage is principally towards Mhairwarra, and some of the streams flow into some of the most important tanks of the district; but a portion of this tract slopes towards the Bednor territory.

54. The slopes of the hills, although they attain a considerable elevation, are not abrupt, so that there is more soil on their sides than on those of the two former tracts.

55. The forest vegetation is the same as in the Chang and Sheopura tracts, with the difference that the salur tree predominates.

56. There are a few patches of cultivation situated in different parts of this tract, which it was found impossible to omit whilst demarcating the tract. The total area of these patches amounts only to about 149 acres.

57. *Village rights.*—The village rights in this tract are vested in the five following villages: Rudhana, Tarraghar, Soniana, Beliawas, and Dudalee.

58. *Habitations.*—There are two small hamlets situated in the middle of the tract, called, respectively, "Ooma-ka-Baria" and "Kulla-ka-Baria." The first of these consists of six houses, and the inhabitants possess the cattle noted on margin.

Cows and calves	...	4
Bullocks	...	3
Buffaloes and calves	...	7
Goats	...	80

59. The second hamlet is at present uninhabited.

60. The jungle being well grown up round about these hamlets, no restrictions have been made to the grazing of the cattle belonging to these hamlets; and as long as the numbers remain about the same, and no damage is done, they may be allowed to remain.

61. *Drinking-places.*—There are no drinking-places of importance within the boundaries of this tract, the effect of the wooded hills being such that water is found in nearly all the nullas outside the forest all the year round.

1. From Rudhana to Kulla-ka-Baria and Kukra.
2. " " to Bednor.
3. " Soniana to Bednor.
4. " Ooma-ka-Baria to Lassaria and Meywar.
5. " Rudhana to Beliawas.
6. " Beliawas to Rooparail, and then to Meywar.

62. *Paths.*—The paths marginally noted traverse this tract, which need not be interfered with, at least for the use of foot passengers at present.

63. *Cultivation, proportional share of revenue, &c.*—A statement showing the areas and proprietors of the various patches of cultivation included within the boundaries of this tract will be found attached, also the proportions of revenue due to the village communities concerned.

64. *Maps of tract, working plan of operations, &c.*—A map of the same dimensions as for the two other tracts has also been prepared for this tract, and the boundaries have been laid down on the Topographical Survey maps of the Mhairwarra district. A rough working plan has been drawn up and sanctioned by the Chief Commissioner up to the end of March 1880.

Todgarh Tract, Mhairwarra District.

65. *Area.*—The area of this extensive tract, excluding all cultivation, is 40,048 acres.

66. *Description of boundaries.*—This tract is bounded on the west by the Marwar territory, except in one place in the neighbourhood of the village of Charpulan or Gaffa, which has been excluded from the forest tract, and is surrounded by a separate line of 42 boundary-pillars, including the two on the Marwar boundary.

67. No. 1 pillar is placed on the Marwar boundary, between the village of Bugree and Assan in Marwar. The line then proceeds above the village of Bugree, all the boundary-pillars being numbered.

68. No. 21 is placed on the top of the hill called "Mata-ka-Danta," after passing which the line proceeds towards the village of Peethakhera or Bhelpunna.

69. The boundary line then proceeds towards the village of Sirma, passes above Khormal and Bamunhera or Nyagawn; and at No. 90 it encounters the stone fence above the village of Bagmal.

70. This fence forms the boundary for about three miles, there being only three pillars, besides the fence.

71. At boundary-pillar No. 93 the fence terminates, and the line passes round the village of Goojerail. After passing this village the line ascends in the direction of Mairyan, and again descends so as to avoid the village of Dudalia.

72. After passing this village, the line again ascends towards Todgarh, and then proceeds towards the village of Dab-gabra, after passing which the boundary passes above the villages of Mundawar, Kachbulli, and Peeplee, from which point it proceeds down the Peeplee "gatie," and again joins on to the Marwar boundary at boundary-pillar No. 157.

73. Inside this main line there is a second line of pillars, forming a semi-circle round the village of Charpulan or Gaffa, which is situated to the west of Khormal.

74. Pillar No. 1 of this second line is situated on the Marwar boundary, and the line then proceeds east, and crosses the path from Bamunhera to Charpulan at No. 15.

75. From this point the line proceeds along the boundaries of the villages of Charpulan, Bamunhera, Khormal, and Sirma, and again joins the Marwar boundary at boundary-pillar No. 42.

76. The boundary-pillars from Nos. 1 to 93, also the line round the village of Charpulan, are constructed of rubble masonry, with a stone slab in middle, on which the numbers are painted in red paint; but from 94 to 157 the boundary-pillars are constructed of lime masonry. The pillars are generally placed within sight of each other.

77. *General description of the tract.*—This tract is situated entirely in the Todgarh tehsil, and occupies the range of hills stretching from the village of Bugree as far as Peeplee Pass.

78. It is bounded on the west by the Marwar territory, except in one place, where the village of Charpulan intervenes. Its total length is about 28 miles, and average breadth about 2 miles.

79. There are only about 258 acres of cultivated land included within the boundaries of this tract, which bears a much smaller proportion to the total area than the cultivated land included in any of the other three tracts.

80. The two highest hills of Mhairwarra, called Mangerji and Gorumji, are included within the boundaries of this tract, the summits of which rise to more than 1,000 feet above the surrounding district.

81. The watershed of the hills is generally towards the plains of Marwar, but a number of the streams from the east slopes flow into several large tanks in the Mhairwarra district.

82. The geological formation of this tract is the same as the two preceding tracts; but one of the peaks, Gorumji, is supposed to be of a volcanic nature, and is occasionally shaken by slight shocks of earthquake.

83. *Trees, bushes, &c.*—The principal tree in this tract is the dhao (*Conocarpus latifolia* and *Pendula*), and in addition to the trees mentioned in paragraphs 12 and 31, are found the chirr (*Pangomia glabra*), saler, khajoor (*Phœnix sylvestris*), shesham (*Dalbergiea sissoo*); also considerable tracts of a small kind of bamboo.

84. The presence of the chirr and the shesham denotes a change in climate; and the vegetation of the south part of this tract may be said to be gradually approaching to that of Central India.

85. A large part of the jungle included within the boundaries of this tract had been cut for manufacturing charcoal by Ajmere contractors about four years ago, but the remainder may be said never to have been touched by the axe.

86. The parts which have been felled will, of course, have to be carefully conserved for three or four years, in order to allow of reproduction; but in the parts which have never been cut, grazing has been permitted under the usual restrictions during certain periods of the year, which arrangement can continue in the meantime, but when any portion is felled, cattle must, of course, be rigorously excluded for five or six years.

1. Bugree.
2. Bhelpunna.
3. Charpulan.
4. Khormal.
5. Sirna.
6. Bamunhera.
7. Bagmal.
8. Guneshpura.
9. Satookhera.
10. Mairyan.
11. Bursawarra.
12. Mundawar.
13. Kachbulli.
14. Peeplee.

87. *Village rights.*—The village rights in this tract are vested in the 14 village communities marginally noted.

88. *Habitations, temples, &c.*—The following hamlets are included within the boundaries of this tract :—

1st.—Booyan-ka-Khet, situated between the village of Peethakhera and the Marwar boundary. This hamlet consists of one house, and possesses the cattle marginally noted.

Bullocks	2
Buffaloes	8

2nd.—Saroopa, situated near the Marwar boundary, behind the hill called Mangerji. It consists of five houses, and possesses the cattle noted on margin.

Cows	49
Bullocks	12
Buffaloes	15
Goats	221
Sheep	60

3rd.—Alleenjra-ki-Gowar, situated about two miles south of Saroopa. It consists of ten houses and possesses the cattle marginally noted.

Cows	122
Bullocks	26
Buffaloes	81
Goats	375
Sheep	74

4th.—Mairyan-ki-Gowar, situated between the village of Guneshpura and the Marwar boundary. It consists of 14 houses; and possesses the cattle noted on margin.

Cows	105
Bullocks	41
Buffaloes	95
Goats	362
Sheep	58

5th.—Kabra Danta, situated between the village of Dudalia and the Marwar boundary. It consists of one house, and possesses 2 bullocks only; but in seasons of scarcity it has been the custom to send the cattle belonging to the village of Todgarh to this place to graze during the hot season.

6th.—Raja Patail-ka-Baria or Jas Palan, situated near the village of Dhola Danta. This hamlet consists of three houses, and possesses the cattle marginally noted.

Cows ...	8
Buffaloes ...	5
Bullocks ...	4
Goats ...	76

7th.—Bheelan-ka-Khet, situated between Todgarh and the Marwar boundary. It consists of one house only, and possesses 2 buffaloes and 14 goats.

89. *Temples.*—There are three uninhabited temples included within the boundaries of this tract which are as follows—

1st.—Mangerji temple, situated on the top of the hill of the same name.

2nd.—Gorumji temple, also situated on the summit of the hill of the same name.

3rd.—Karooran, or Alladi-ki-Tomb, situated between the village of Dab-gabra and the Marwar boundary.

The first of these temples is the most important, and two large *mêlas*, or fairs, are held during the year, attended by all the surrounding villagers. The other two temples are of less importance, and one *mêla* only takes place at each annually.

90. *Paths.*—The following roads and paths traverse this tract, some of which are of considerable importance :—

1st.—Path from the village of Bugree to Assan in Marwar, used for mounted and foot passengers.

2nd.—From Bugree to Khejri-ki-Bala in Marwar, used for foot passengers.

3rd.—From the village of Bhelpunna *viâ* Mata-ka-Danta to Khejri--ka-Bala, used for mounted and foot passengers.

4th.—From Bhelpunna *viâ* Mata-ka-Danta to Ryopur in Marwar.

5th.—From the village of Peethakhera *viâ* Lalla-ki-Talai to Khejri-ka-Bala, foot passengers only.

6th.—From the village of Sirma to Charpulan and Gaffa, used for foot and mounted passengers.

7th.—From Khormal to Gaffa, used for foot passengers and for driving cattle to graze when permitted.

8th.—From village of Bamunhera to the villages of Gaffa or Charpulan, also to Saroopa, used for foot and mounted passengers.

9th.—From Bagmal to Mangerji temple, used for foot passengers only.

10th.—From Guneshpura to Mairyan-ki-Gowar, used for foot passengers.

11th.—Guneshpura to Syren in Marwar, used for foot and mounted passengers.

12th.—From the village of Goojerail *viâ* Chuppi Dai to Syren in Marwar, foot and mounted passengers.

13th.—From the village of Goojerail to Mairyan, foot passengers only.

14th.—From Goojerail to Dudalia, used for foot and mounted passengers.

15th.—Dudalia to Todgarh, used for foot and mounted passengers.

16th.—From Dab-gabra to Bori Manda and Syren in Marwar.

17th.—From Todgarh to Beron-ki-Deh, a watering-place, only used when the entry of cattle is permitted.

18th.—From Kachbulli to a grove called Varr in Marwar, where a great *mêla* takes place annually, used for foot and mounted passengers.

19th.—From the village of Kachbulli to Phoolaj in Marwar, used for foot and mounted passengers, and is one of the principal thoroughfares for the transport of grain, salt, &c., between Marwar and Meywar. A toll is levied by the Rana of Oodeypore, who keeps the road in repair.

20th.—From Kachbulli to the Gorumji temple, used for foot passengers only.

91. *Drinking-places.*—There are numerous perennial springs and nullas issuing from the jungle-clothed hills of this tract; but the three following may be mentioned as the most important, and are said never to dry up completely even during long periods of drought :—

1st.—Awnlie-ki-Deh, situated between the villages of Bugree and Assan in Marwar.

2nd.—Rai-Deh, situated between Bhelpunna and Khejri-ki-Bala.

3rd.—Beron-ki-Deh, situated in the middle of the jungle below Todgarh.

92. Special permission was given to the villagers of Bugree to water their cattle at the first of these places last season during the hot weather ; but the entrance of cattle to the other two was not considered necessary, as there was plenty of water outside the jungle.

93. *Temporary "gowars," or grazing-huts.*—As already explained in paragraphs 85 and 86, a large portion of this tract has never been felled, and in such portions grazing has been permitted, subject to the usual restrictions as to lopping trees, lighting fires, &c.

94. This grazing is only allowed to the neighbouring villagers on condition of good behaviour, as it would be a great hardship to close the whole of this large tract at once ; but the right of Government in accordance with the conditions of the Forest Regulation to close any portion for reproduction is in no way interfered with, and certain portions have been strictly closed during the current year.

95. The following is a list of these "gowars" as they existed last hot weather, with the names of the villages whose cattle have been permitted to graze in their neighbourhood :—

1st.—Booyan-ki-Kooie, situated on the path from Bhelpunna to Khejri-ka-Bala, used for the cattle of the villages of Bhelpunna and Peethakhera.

2nd.—Kutmal-ka-Danta, situated between the village of Khormal and the Marwar boundary, formerly used by the villagers of Khormal.

3rd.—Chelia-ki-Gowar, situated between Mangerji and Gaffa, formerly used by the villagers of Dowlutya for grazing purposes.

4th.—Ingleawa-ki-Gowar, situated in nulla behind Mangerji, used for grazing the cattle of Burrakhera and Bamunhera.

5th.—Bagrajamp-ki-Gowar, situated about two miles from the former, and used for grazing the cattle of the village of Bagmal.

6th.—Baruki-ki-Talai, situated not far from the former, and used for grazing the cattle of the village of Burakhan.

7th.—Ser ki Gowar, situated about two miles from the former, and also used by the Barakhan people.

8th.—Simlia-ki-Gowar, situated near the former, and used by the Barakhan people also.

9th.—Bor-ki-Naie, situated between Guneshpura and Marwar, used for grazing the cattle belonging to the *jogis* of Assan.

10th.—Rooparail-ki-Gowar, situated near the former, and used for the cattle of the village of Satookhera.

11th.—Goradeh-ki-Gowar, situated near the hamlet of Mairyan, and used for grazing of the cattle of the village of Gogola.

12th.—Goondia ki-Gowar, also situated near Mairyan, also used by the Gogola cattle.

13th.— Somberdeh-ki-Gowar, situated near the the former, and also used by the Gogola cattle.

14th.—Lassema-ki-Gowar, situated behind the Hemlie-ki-Pohar, and used for grazing the cattle of Dhola Danta.

15th.—Phoola-ki-Gowar, situated on the path to Syren, and used for grazing the cattle of the village of Goojerail.

96. *Patches of cultivation, proportional share of revenue, &c.*—A statement showing the areas and names of the proprietors of the different patches of cultivation will be found elsewhere, as well as the proportion in which the revenue from this tract, if any, will be divided amongst the village communities concerned.

97. *Maps, working plan, &c.*—A large settlement map of very unwieldy dimensions exists of this tract, from which a smaller map has, however, been reduced, and the boundaries have lately been laid down on the topographical map.

98. A rough working-plan up to the end of 1879-80 has been drawn up and sanctioned by the Chief Commissioner, which includes all operations to be executed up to that date.

Dilwarra and Chang Birs.

99. *Area.*—The area of these two tracts, as taken up under the Forest Regulation, amounts to 235 acres.

100. *Description of boundaries.*—The boundaries of the Dilwarra Bir have been completely demarcated by means of 56 stone boundary-pillars bearing serial numbers cut into the stone. *Thor* fences and shallow ditches have also been constructed between the pillars, so that no mistake with respect to the boundaries can possibly occur.

101. The boundaries of the neighbouring Chang Bir have also been demarcated by means of 28 stone boundary-pillars, also by *thor* bush hedges and earthen embankments and ditches on all sides.

102. The following is the description of the boundaries of these two tracts published in the *Rajpootana Official Gazette*, dated 10th June 1876.

Dilwarra Bir.—This tract is bounded on the north, from boundary-pillar No. 56 to No. 7, by the lands of the village of Dilwarra; on the east, from boundary-pillar No. 7 to No. 20, by lands belonging to the villages of Dilwarra and Guddee; on the south, from boundary-pillar No. 20 to No. 23, by the district road from Beawur to Mussuda; on the west, from boundary-pillar No. 23 to No. 56, by the fields of Ram Lall Burr, Sajhee Seth, Ramur, Ram Singh, and Gaina.

Chang Bir Tract.—The tract is bounded on the north by a portion of the station or circular road and the compound of the Overseer's bungalow, Irrigation Division; on the east, from boundary-pillar No. 1 to No. 20, by cultivated fields belonging to the Telis and other inhabitants of Beawur,—also, from boundary-pillar No. 20 to No. 21, by a portion of the road going from Beawur to Purwustee; on the west, from boundary-pillar No. 21 to Overseer's bungalow, by the circular or station road, and including the plot of land known as Futtehpore Bagh, and excluding a patch of ground occupied by lime-burners.

103. *General description of the tracts.*—The Dilwarra Bir is situated about half a mile to the south-east of Beawur, and is of a very irregular shape, being surrounded on all sides by patches of cultivation belonging to the inhabitants of Beawur, which are, of course, valuable on account of their proximity to the town.

104. The total length of the tract is about 72 chains, and the average breadth about 25 chains.

105. The nature of the land is generally of a very rocky and barren kind but there are a few patches of good soil where the better kinds of trees may be expected to thrive. There are two wells constructed by the late Colonel Dixon, who commenced plantation operations at this tract; also three or four small bunds, or "nadis," which retain water for a short time.

106. The Chang Bir tract is situated still closer to the town of Beawur, and is also of rather an irregular shape, owing to the presence of patches of cultivation outside the boundary. The total length is about 96 chains, and the average breadth varies from 1 to 10 chains, and the nature of the land is also of a very rocky and barren description.

107. *Trees, bushes, &c.*—There is a fair amount of natural growth on both of these tracts, also a good many of the trees planted by Colonel Dixon still remain; and as several ducts from the neighbouring tanks have lately been constructed through these tracts, a certain supply of water will be available for plantation purposes.

108. *Village rights.*—Both these plots of land have been recorded as Government property at the last settlement, so that no rights exist, except those of Government.

109. *Paths.*—The district road from Beawur to the village of Dilwarra traverses the Dilwarra Bir; also what is called the municipal circular road passes through both plots, the boundaries of which are marked off by means of ditches.

110. *Maps, working-plan, &c.*—In addition to the settlement maps of these tracts, magnetic compass surveys of the boundaries have been made, and the maps are recorded in Assistant Conservator's office.

111. A rough working-plan has been drawn up and sanctioned by the Chief Commissioner up to the end of 1879-80.

112. A proposal has been made by the Assistant Commissioner, Beawur, to take over the whole of the Dilwarra Bir as a municipal plantation on account of a small plot of land being required for the Beawur tanneries; but if a wall is built round the portion wanted, so as to prevent cattle from straying into the neighbouring tract, there seems no particular reason why the whole tract should be made over.

Mhowa Bir and Mudar Hill Tract, Ajmere District.

113. *Area.*—The area of these two tracts, according to the form of declaration lately submitted for sanction, amounts to 2,812 acres.

114. *Description of boundaries and boundary-marks.*—The boundaries of these two tract which form in reality only one tract, ave been defined by means of two sets of stone boundary-pillars, surrounded by a base of rubble masonry.

The Mhowa Bir part of the tract has been demarcated by means of 90 boundary-pillars, and the Madar Hill part by means of 26 boundary-pillars, all bearing serial numbers cut into the stone.

115. No. 1 boundary-pillar is placed on the side of the Lohagul road, about half a mile from Ajmere, and the line proceeds towards the Anasagur Lake, and, as far as boundary-pillar No. 7, skirts several fields; also the grove belonging to the heirs of Dhunroop Nazir.

116. From this point it proceeds along the base of the hill, and, after passing the temple of Mata arrives near the village of Lohagul, boundary-pillar No. 22.

117. From this point the line ascends the hill, crosses the Lohagul road at boundary-pillar No. 26, and again descends to the plain at boundary-pillar No. 30.

118. The line then proceeds along the foot of the hill till it arrives at boundary-pillar No. 42, where it again ascends, in order to avoid the village of Bowani Bao, and again reaches he base of the hill at boundary-pillar No. 46.

119. From this point the line proceeds along the foot of the hill, and, after passing "Chand-Khan-ki-Nall" and the Public Works Department quarries, arrives on the side of the Kishengurh road, opposite the Mirsha Ally garden, at boundary-pillar No. 59.

120. From boundary-pillar No. 59 to No. 66 the line passes along the side of the circular road, escaping certain patches of cultivation, and from No. 67 to No. 86 the boundary passes round the lands known as Nuzur-Ally-ki-Nall.

121. At boundary-pillar No. 90 the line joins the *thor* fence, which borders the circular and Lohagul roads, back to boundary-pillar No. 1, the point of departure.

122. Inside this main line of boundary-pillars there is a second line of eleven boundary pillars demarcating a mango grove known by the name of Maindi Kola.

123. *Madar Hill portion.*—Boundary-pillar No. 1 is placed on the side of the Kishengurh road, about a quarter of a mile from boundary pillar No. 59 of the Mhowa Bir portion.

124. The line then skirts some fields, and at boundary-pillar No. 7 arrives above the hamlet of Kankur-ki-Talai, and then proceeds along the base of the hill above the villages of Russupura and Mudarpura, till it arrives at boundary-pillar No. 17.

125. From this point the boundary proceeds in a straight line towards the Madar temple, and then follows the ridge of the hill, till it arrives above the Mirshah-Ally-garden, boundary-pillar No. 25, from whence it descends to boundary-pillar No. 26, and then follows the Mirsha Ally Bir fence and Kishengurh road back to boundary-pillar No. 1.

126. Within the boundaries of these tracts are included two nazul gardens called Mirsha Ally and Mhowa Baghs, the boundaries of which are defined by means of stone walls.

127. *General description of the tracts.*—This tract is situated in the neighbourhood of Ajmere, and occupies the range of hills stretching from the Anasagur Lake in the direction of the Mayo College, as far as the Mudar temple.

128. This tract includes a considerable part of the Cutch basins of the Anasagur Lake, the Beesla, Keerani, Pura, Gugra, and other important tanks; and some of the peaks attain a considerable elevation.

129. The geological formation of this tract consists principally of mica schists and quartz rocks, and as most of the hill slopes have been denuded of wood for many years, very little soil now remains.

130. *Trees, bushes, &c.*—With the exception of the portions of these tracts known as the Mhowa and Mirsha Ally Birs, which have been under conservancy for the last four years, the greater part of this tract may be said to be altogether barren and destitute of all tree vegetation. A few *thor* bushes are to be found scattered here and there over the hill-sides; but even these are rare on account of the demand for this kind of fuel for the city of Ajmere.

131. There can be no doubt, however, that some of the roots and stumps of the former trees still remain, which, if only protected from cattle, will throw out vigorous shoots, and the tract will gradually become covered with vegetation in the same manner as the Mhowa Bir portion has.

132. *Village rights.*—The village rights in this tract are vested in the Nazul Fund, the city of Ajmere, and the five following villages, *viz.*, Lohagul, Chowrasyawas, Kankur Dah, Gugra, and Mudarpura, and the proportion in which the revenue will be divisible may be seen from the accompanying statement.

133. *Habitations, temples, &c.*—No hamlets or habitations are included within the boundaries of this tract, with the exception of the huts occupied by the *malis* employed at the two nazul gardens mentioned in paragraph 126.

134. One temple called Matajee, inhabited by a fakir, is situated within the boundaries of this tract, near boundary-pillar No. 12.

135. *Roads, paths, &c.*—The imperial road from Ajmere to Kishengurh traverses this tract, also the district road from Ajmere to Lohagul. A path passes through the Mudar Hill portion of the tract from the village of Mudarpura to the Mudar temple; also the proprietors of the land known as Mendikola, referred to in paragraph 122, have been allowed a passage along the nulla from the Mhowa garden.

136. *Scattered fruit trees.*—A number of fruit trees, principally mango and jamun, have been unavoidably included within the boundaries of this tract. These trees were planted principally by the late Colonel Dixon, and belong to the Nazul Fund; but a few belong to private individuals, whose proprietary right cannot, of course, be interfered with unless compensation is awarded.

137. The total number at present existing amounts to 242, a register of which is attached, showing their situation, names of proprietors, present condition, &c.

138. Besides these, there are a number of small fruit trees recently planted, and as the cost of planting, watering, &c., has been met from forest funds, these trees, of course, belong to the Forest Department.

139. *Patches of cultivation, proportional share of revenue, &c.*—All cultivation has been excluded from this tract, and the proportion in which the revenue will be divisible between the Nazul Fund, the Kusba of Ajmere, and the five other villages may be seen from the accompanying statement.

140. The revenue to be divided will not include the sale of grass and dry wood without the special sanction of the parties concerned, as it has been laid down in section 4 of the Forest Regulation that these products are reserved for the present proprietors of the land.

141. *Quarries.*—There are a number of old quarries and kunkur pits situated in various parts of this tract, which seem to belong to no one in particular, and any one who wants stones removes them, so that there will be no difficulty in closing them, if required.

142. *Maps, working-plan, &c.*—A large map of this tract, scale 4 chains=1 inch, has recently been prepared by the sanctioned survey establishment, which shows all boundary pillars, gardens, roads, places where fences are to be constructed, and all other details. The boundaries have also been entered by Mr. Leach on the new topographical map.

143. A rough working-plan for the five years ending 31st March 1880 has also been prepared and submitted for the sanction of the Chief Commissioner.

Shreenuggur and Bir Tract, Ajmere District.

144. *Area.*—The area of this tract according to the revised form of declaration amounts to acres 3,575, excluding all cultivated and culturable land.

145. *Description of boundaries and boundary-marks.*—The boundaries of this tract are defined by means of 148 stone boundary-pillars; also by *thor* fences in some places.

146. No. 1 boundary-pillar is placed on the side of the district road from Ajmere to Shreenuggur at the place called the Burlaghati, and the line passes along the base of the hil, in a northern direction, and, after rounding the end of the range above the village of Khorawasl again encounters the district road at boundary-pillar No. 60.

147. From this point the line follows the side of the district road, which it leaves at boundary-pillar No. 71, and then proceeds towards the ridge of the Shreenuggur range, which it attains at boundary-pillar No. 79.

148. The line then passes along the ridge of the Shreenuggur range, and at boundary-pillar No. 92 arrives above the village of Bir, from which point it proceeds round the edge of the new Bir tank, passes above the village of Palran, and at boundary-pillar No. 141 arrives above the village of Burla, from whence it proceeds back to boundary-pillar No. 1 at the side of district road at Burlaghati.

149. Inside this main line there is a second line of 54 boundary-pillars forming a semi-circle, commencing at boundary-pillar No. 60, and terminating at boundary-pillar No. 78, which defines the limits of the Shreenuggur grazing during nine months of the year, afterwards explained in paragraph 165.

150. All these pillars consist of stone slabs elevated on a rubble masonry pillar 3 feet high, and all the slabs bear serial numbers cut into the stone.

51. *General description of the tract.*—This tract is situated between Ajmere and Shreenuggur, and occupies the range of hills forming the catchment areas of Bir and Shreenuggur; also a portion of the basins of the Burla, Palran, Naroli, and other tanks.

152. The geological formation consists of mica schists, quartzite, actynolite schist, and other metamorphic rocks. Extensive and productive quarries exist in the immediate neighbourhood of this tract, which furnish slab stones of almost any dimensions employed extensively for building purposes at Ajmere.

153. The lower slopes of the hill ranges, also the portions lying between the hills, are covered with a fair amount of soil, and water is found near the surface in most of the nullas nearly all the year round, so that planting operations on a small scale may be undertaken with advantage.

154. *Trees, bushes, &c.*—The whole of this tract may be said to be barren and destitute of all vegetation, with the exception of an extensive growth of *thor* or *Euphorbia* bush.

155. A few stunted trees or bushes, principally dhao, salur, and kumta, still exist, which indicate the nature of the former jungle; also a good many neem trees are found growing out of the *thor* bushes.

156. *Village rights.*—The village rights in this tract are vested in the following villages: Shreenuggur, Palran, Bir, Goda, and Burla.

157. *Habitations, temples, &c.*—No permanent habitations or temples have been included within the boundaries of this tract, but proprietors of cultivated fields have been permitted to build temporary huts during the time they cultivate their fields.

1. From Ajmere to Bir.
2. „ Shreenuggur to Bir.
3. „ Narolli to Shreenuggur over hill.
4. From Burla over hill to fields and on to Bir village.

158. *Roads, paths, &c.*—The district road from Ajmere to Shreenuggur traverses a portion of this tract, also the four paths marginally noted, which need not be interfered with in the meantime.

159. *Drinking-places.*—There are no drinking-places of importance included within the boundaries of this tract, with the exception of one well situated above the Bir tank near boundary-pillar No. 18, but since the construction of the new tank, plenty of water is found outside the tract.

160. *Patches of cultivation, proportional share of revenue, &c.*—From the accompanying statement may be seen the areas and names of the proprietors of all cultivation included within the boundaries of this tract.

161. A statement also accompanies, showing the proportion in which the revenue from this tract, if any, will be divisible amongst the parties concerned.

162. *Grazing right of the inhabitants of Shreenuggur.*—In consequence of the greater part of the waste lands of the village of Shreenuggur being included within the boundaries of this tract, and as the village posseses an immense number of cattle, it was found necessary to make some arrangement, so as to allow grazing of cows, bullocks, and buffaloes during certain seasons of the year.

163. After the matter had been fully inquired into by the Deputy Commissioner, it was agreed to allow the grazing of the cattle above enumerated belonging to the village of Shreenuggur during eight or nine months of the year, the tract being altogether closed during the remaining three or four, so as to allow of reproduction and sowing operations.

164. This arrangement has been put into force during the current year, and the tract has been altogether closed since the 20th June.

165. This grazing is only allowed on the lower slopes of the hill ranges and intermediate plain, the limits of which area is bounded on the one side by the district road from Ajmere to Shreenuggur, and on the other by the second line of 54 boundary-pillars, referred to in paragraph 149.

166. *Maps, working-plan, &c.*—A large map of this tract, showing the boundaries according to the first demarcation, was furnished by the Settlement Department, which is, however, still useful, as showing the different patches of cultivation, but of no use for illustrating the boundaries.

167. The topographical survey executed by Mr. Leach, however, shows the position of the boundary-pillars as finally demarcated, and the map can be enlarged if required.

168. A rough working-plan for the five years ending 31st March 1880 has been prepared and submitted for the sanction of the Chief Commissioner.

Nagpahar Tract, Ajmere District.

169. *Area.*—The area of this tract, including Pokar Bagh, amounts to 2,660 acres.

170. *Description of the boundaries and boundary-marks.*—The boundaries of this tract are defined by means of 131 masonry and slab stone boundary-pillars; also in some places by *thor* fences, and by the old walls of the Nagpahar fort.

171. No. 1 boundary-pillar is placed half-way up the hill above the village of Nowser on the Ajmere side of the tract, and boundary-pillar No. 2 at the base of the hill, from which point the boundary is defined by means of a line of masonry boundary-pillars and *thor* fences as far as boundary-pillar No. 29 about 1½ miles from the village of Hathikhera.

172. From this point the line ascends, crosses the Nagpahar range, and reaches the base on the Pokar side at boundary-pillar No. 35.

173. The line then proceeds along the base of the Nagpahar, till it arrives at boundary-pillar No. 65, where there is a slight deviation in order to avoid the temple and plot of land called Mama Deo, after passing which it again descends, passes round the plot of land called Jumni Kund, and reaches the corner of Puch Kund at boundary-pillar No. 85.

174. From this point the line again ascends, passes round the temples and lands called Puch Kund, and reaches the corner of the Pokar garden at boundary-pillar No. 101.

175. The boundary is then defined by means of a ditch with slab boundary-pillars, and arrives at the side of the district road to Pokar at boundary-pillar No. 109, near Kappul Khund Chowkey.

176. The line then proceeds along the foot of the Nagpahar, and at boundary-pillar No. 112 ascends along the edge of the property of Dooda Dharee.

177. No. 117 boundary-pillar is placed below the bastion of the old Naghpahar fort, from which point the line proceeds in a northern direction past the valley called Hatikhola, the old Nagpahar tank, and joins on to the old fortification wall at boundary-pillar No. 131, from which point the wall forms the boundary back to No. 1 boundary-pillar.

178. Inside this main line of boundary-pillars there are two others, consisting of nine and six pillars respectively, which define the boundaries of the lands belonging to the two temples called Gow Mukh and Aughust, both situated on the Pokar side of the tract.

179. The pillars consist of stone slabs three feet high, also of masonry pillars in some places; and all have numbers painted on them with red paint.

180. *General description of the tract.*—This tract occupies the range of hills between Ajmere and Pokar, from the base of the hill on one side to the base on the other.

181. The streams from this range of hills flow into the Anasagur and Pokar Lakes, and the slopes are abrupt, and even precipitous, on the Ajmere side.

182. The geological formation of the range consists of mica schist and quartzite, and there is a fair depth of soil on the back slopes of the hill, whilst on the side next Ajmere the surface is covered with loose stones and boulders.

183. The rock of which this range is composed is of a very porous nature, and is thickly traversed by numerous cracks and fissures, generally perpendicular to the surface, so that the rain water is rapidly absorbed, and comes out in numerous springs towards the foot of the hill.

184. At several of these springs, or "kunds," principally on the Pokar side, small temples have been built, and several Brahmins have taken up their abode. Among these are the Dhani Kund, the Puch Kund, and Jumni Kund, all of which are favourite places of resort for pilgrims during the Pokar *mela*.

185. All these springs appear to have been made over as separate grants to the Brahmins; and as the patches of jungle surrounding the springs and temples are considered sacred, there is no great danger of its being cut down.

186. *Trees, bushes, &c.*—The greater part of this tract, especially the slopes next Pokar, is fairly covered with trees and bushes of various kinds, amongst which may be noticed the salur, dhao, dak, kumta, orinj, and other thorny trees and bushes.

187. The mango tree also grows well in most parts of this hill, where there is sufficient moisture and depth of soil.

188. A small species of bamboo (*Bambusa strecta*) also flourishes in this tract, and there are some fine clumps on various parts of the hill, which have increased rapidly since the tract has been conserved.

189. *Village rights.*—The village rights in this tract are vested in the Nazul Fund and in the villages of Hathikhera, Kotra, and Neela Seoree.

190. *Habitations, temples, &c.*—The two temples already referred to in paragraph 178, *viz.*, Gow Mukh and Aughust, are situated within the boundaries of this tract, the limits of which have been demarcated by means of separate lines of boundary-pillars.

191. Besides these, there is another building called "Gad-bad," inhabited by a fakir, situated near boundary-pillar No. 64, which does not possess any land attached.

192. *Grass-cutting rights.*—The Settlement Officer, in his No. 298, dated 22nd July 1874, has defined the different rights in this tract, which may be stated shortly, and are as follows:

In the 4,847 bighas belonging to the District Fund no rights exist, except those of the Nazul Fund, which are now subject, of course, to the conditions of the Forest Regulation since the tract has been taken up for forest purposes.

193. In the 1,682 bighas taken up in the villages of Hathikhera and Kotra, the inhabitants of these villages have the right to cut the grass during the first two days after the *Dasera*, and afterwards in common with the Telis of Ajmere, always provided the forest officer has not closed any portion for reproduction under section 5 of the Forest Regulation. The inhabitants of both villages are also to be allowed as much dry *thor* as is necessary for their domestic purposes from the 1,682 bighas.

194. The rights in the portion belonging to the village of Neela Seoree are, of course, defined in the Forest Regulation.

Scattered fruit trees.—Nine hundred and seven fruit trees, principally mango, are included within the boundaries of this tract. The greater number of these trees belong to the Nazul Fund, and a register is attached, showing the situation, proprietor's name, present condition, and size of all these trees.

195. *Luchmi Poll.*—There is an old gate of the Nagpahar Fort, called Luchmi Poll, which has some sacred relations, and where a *mêla* takes place once a year, which has not been interfered with up to the present, and will not, of course, be interfered with.

196. *Paths.*—Two paths traverse this tract, one from the village of Hahikhera to the village of Pokar, and another along the foot of the hill through Pokar Bagh from boundary-pillar No. 110 to boundary-pillar No. 102, both of which might be closed with advantage.

197. Access is also allowed through the forest tract to the two temples Gow Mukh and Aughust, and to the proprietors of the houses situated at Gad-bad.

198. *Patches of cultivation, proportional share of revenue, &c.*—There are no patches of cultivation included within the boundaries of this tract, and the proportion of all revenue from forest produce, excepting grass and dry wood, may be seen from the accompanying statement.

199. *Maps, working-plan, &c.*—The settlement map of this tract received from the Settlement Officer is not at all satisfactory, and the boundaries of certain portions of the tract seem to have been tampered with whilst the map was in the Deputy Commissioner's office.

200. The boundaries have, however, been properly laid down on the topographical map, which can be enlarged if necessary, and will suffice for present purposes.

201. In the same manner as for all the other tracts, a rough working-plan has been prepared and sanctioned for the five years ending 31st March 1880.

Tarragarh Tract, Ajmere District.

202. *Area.*—The area of this tract, excluding all private grant, amounts to 1,016 acres.

203. *Description of boundaries, &c.*—The boundaries of this tract are defined naturally in most places, also by the old fortifications of Tarragarh; but, in order to prevent all mistakes, 27 boundary pillars have been erected in places where doubts might arise.

204. The following is the description of the boundaries of this tract, as published in the *Rajputana Official Gazette*, dated 10th June 1876:—

"This tract is bounded on the north by the old wall of Tarragarh fort, which separates the reserved tract from the valley of Indurkote; on the west, by the old fortifications situated on the ridge of the hill, and a line of six boundary-pillars up to the boundary of the village of Doomara; on the south, by the lands of the village of Doomara, from which it is separated by three boundary-pillars; on the east, by the line of fortifications of Tarragarh, and eighteen boundary-pillars separating the reserved tract from the grazing lands of the villages of Samulpore, Ajmere Kusba, Doomara, and the tract of land belonging to the Ajmere Mission."

205. All these pillars are of masonry three feet high with numbers painted on sides in large letters.

206. *General description of the tract.*—This tract is situated between the old Tarragarh fort and the boundary of the village of Doomara, and includes the three valleys known by the name of Nurchashma, Burree Nall, and Emlee Kund, which have now been in the possession of the Forest Department for about four years.

207. The geological formation of this tract is the same as the Nagpahar tract; but the land is in some places of good quality, with water near the surface all the year round.

208. *Trees, bushes, &c.*—The greater part of this tract, when taken up, was altogether barren and denuded of tree-vegetation; but since it has been under conservancy, a considerable

growth of dhao, ber, kejra, dak, and bamboos has gradually sprung up, and the hill-sides are now becoming well covered with brushwood. Some successful planting of mango and sheesham trees has also been done in the lower parts of the three valleys already mentioned.

209. *Village rights.*—The proprietary right to the whole of this tract, also the outside slopes of the hills from one base to the other, as well as the land at present leased by the Ajmere Presbyterian Mission, is vested in Government.

210. The manner in which the proprietary right has been acquired may be learnt from a perusal of the lengthened correspondence ending with Settlement Officer's No. 414, dated 23rd September 1873.

211. *Grass-cutting right of neighbouring villagers.*—The following grass-cutting right has been recorded at last settlement, and the arrangement has been carried into effect during the last three years:—

The inhabitants of Indurkote village, Ajmere, possess the right to cut the grass from any part of the demarcated forest tract, except where the grass has been specially reserved, by order of the forest officer, for four days, commencing from the fourth day after the *Dasera*, and afterwards the four villages marginally noted possess the same right, in common with the inhabitants of Indurkote, for six weeks, less four days, commencing from the fourth day of the *Dasera*.

1. Kusba of Ajmere.
2. Boraj.
3. Kazipura.
4. Taaragarh.

212. The Settlement Officer further states, in his No. 414, dated 23rd September 1873, that the grass must be cut and removed by *bonâ-fide* inhabitants of these villages, and that they are not authorised to employ hired labour to remove the grass for them. The grass must also be removed out of the boundaries of the forest tract at the expiration of the six weeks.

213. *Scattered fruit trees.*—A number of fruit trees, principally mango, were planted in various parts of this tract previous to its being taken up under the Forest Regulation, a list of which, showing dimensions and present condition, is attached. All these trees, 417 in number, are, with the exception of two, situated in the Nurchashma valley, and the proprietors only possess the right to the trees themselves, and not to the ground on which they grow.

214. *Gardens, grants, &c.*—There are three gardens, marginally noted, situated within the boundaries of the Nurchashma valley, the limits of which are defined by means of stone walls.

1. Nurchashma garden, property of Nazul Fund.
2. Meeran Saheb's Bagh.
3. Sheikh Raheem's Bagh.

215. There are also two grants of land made by the late Colonel Dixon to two inhabitants of Indurkote, called Sheikh Raheem and Sheikh Dulleil, which measure, respectively, 22 bighas and 13 bighas and 15 biswas. The boundaries of these grants have been defined by means of six and seven boundary-pillars, and the grass, wood, &c., of course is the exclusive property of these persons, independent of all other arrangements.

216. *Paths.*—The following four paths traverse this tract:—

1st.—From Tarragarh to Ajmere.

2nd.—From Tarragarh to Nurchashma.

3rd.—From Nurchashma to the village of Soomulpur.

4th.—From the village of Kazipura to the village of Soomulpur.

217. *Habitations, cultivation.*—One hut, inhabited by the *mali* in charge of Meeran Sahib's garden, is included within the boundaries of this tract; there are also some old ruinous buildings, said to have been formerly occupied by the Mahratta cavalry, none of which are, however, inhabited. There is no cultivation of any kind included within the boundaries of this tract, with the exception of the garden already referred to in paragraph 214.

218. There is an old broken tank, situated between boundary-pillar Nos. 11 and 12, just outside the tract; but if it is afterwards repaired, a large part of the Burri Nall plantation will be flooded, and some compensation will have to be awarded to the Forest Department for damage done to trees planted in the old bed.

219. *Share of revenue.*—The whole of this tract being the property of Government, and the Nazul Fund never having taken any charge of the land, the whole of the revenue from all sources, including sale of grass, after the expiration of the six weeks referred to in paragraph 211, will be creditable to the Forest Department.

220. *Maps, working-plan, &c.*—A good map of this tract has been prepared under the direct supervision of the Assistant Conservator, which shows all necessary details. The boundaries have also been laid down on the topographical map, so that this tract is well provided with maps.

221. A rough working-plan for the five years ending 31st March 1880 has also been prepared for this tract, and duly sanctioned by the Chief Commissioner.

Rajaoske Tract, Ajmere District.

222. *Area.*—The area of this tract, according to the survey lately executed, amounts to 1,260 acres.

223. *Description of boundaries and boundary-marks.*—The limits of this tract have been temporarily demarcated by means of 47 slab boundary-pillars, bearing serial numbers cut into

the stone. No. 1 boundary pillar is placed near the edge of the Ajmere and Nasirabad road, about eight miles from Ajmere, from which point the line proceeds round the base of the hill, and arrives above the village of Rajaosee at boundary-pillar No. 19. From this point the line returns round the base of the hill above the villages of Hutundi, Khowajpura, and Makhoopura, back to boundary-pillar No. 1, on the side of the Nasirabad road.

224. This tract not having been yet acquired under the Forest Regulation, slab pillars have only been employed for the present; but it is intended to make these permanent by embedding them in rubble masonry as soon as the tract is taken up. All the pillars are placed within sight of each other.

225. *General description of the tract.*—This tract occupies the range of hills stretching from the Nasirabad road to the village of Rajaosee, and includes only waste hilly lands.

226. These hills are of a very barren and denuded nature, and must have been cleared of all jungle many years ago, so that the operation of re-foresting them will be a particularly difficult task.

227. The geological formation is the same as that of all the other hills in the neighbourhood of Ajmere, but the land on the south side of the range consists of a series of low sand "dunes."

228. The streams from this range supply the Danta, Jatia, Balwanta, Rajaosee, Hutundi, and Makhoopura tanks, but, with the exception of the Kajoor and Balwanta nullas, they all dry up soon after the rains are over.

229. *Trees, bushes, &c.*—As already explained, this tract contains little or no vegetation, beyond a few *thor* bushes; but the stumps and roots of the former trees still exist, and will soon commence to make an appearance whenever cattle are excluded.

1. Rajaosee.
2. Khowajpura.
3. Balwanta.
4. Jatia.
5. Makhoopura.
6. Danta.

230. *Village rights.*—According to the proposed demarcation, the shares of revenue, if any, will be payable to the six villages noted on the margin in the proportion given in the attached statement. No paths, habitations, patches of cultivation, scattered trees, or any other rights or privileges are known to exist within the boundaries of this tract.

231. *Maps, working-plan, &c.*—A map of this tract has lately been prepared by the sanctioned surveying establishment; and as the tract was not demarcated when the topographical surveyors were last at Ajmere, the boundaries have not been laid down on the topographical map.

232. A rough working-plan up to 31st March 1880 has been prepared, and submitted for the sanction of the Chief Commissioner.

Borwar and Kotra Tract, Mhairwarra District.

233. *Area.*—The area of this tract, or rather the two portions which have been demarcated separately, amounts to 3,923 acres.

234. *Description of boundaries, &c.*—This tract has been demarcated by means of two sets of boundary-pillars, which may be called the Borwar and Kotra portions.

Borwar portion.—The proposed limits of this portion of the tract have been marked off by means of 29 boundary-pillars. No. 1 boundary-pillar is placed on the top of the hill near the Bur Pass road above the village of Dhuliya, from which point the line follows the ridge of the hill till it arrives at boundary-pillar No. 3, where it descends to the base. From this point the line proceeds along the side of the Ania tank or jheel, and, after passing some patches of cultivation, arrives at boundary-pillar No. 8, above the village of Ramgurh. The line then proceeds along the side of the old Beawur and Marwar road, and, at boundary-pillar No. 16, arrives above the hamlet called Baria Mota, from which point the line proceeds along the base of the hill in a northern direction as far as boundary-pillar No. 21. From this point the line proceeds round the village of Borwar, and reaches the point of departure at boundary-pillar No. 29.

235. *Kotra part.*—The proposed limits of the Kotra portion of this tract are defined by means of 22 boundary-pillars. No. 1 boundary-pillar is placed next to the Marwar boundary above the village of Seeleberee, from which point the line proceeds in the direction of Baria Mota, and then runs parallel to boundary-pillars Nos. 14 to 9 of the Borwar part of the tract as far as boundary-pillar No. 10.

From boundary-pillar No. 10 the line proceeds in the direction of the village of Kotra, and keeps along the base of the hill as far as boundary-pillar No. 18, where it enters the lands of the village of Koondal, from which point the line proceeds past the Koondal tank, and again joins on to the Marwar boundary at boundary-pillar No. 23. The boundary-pillars consist of slab-stones elevated on a rubble masonry pillar three feet high, and all bear serial numbers painted on the slabs with red paint.

236. *General description of the tract.*—This tract is situated about eight miles from Beawur, and occupies the range of hills stretching from a point near the Bur Pass towards the village of Koondal; and the tract has been divided into two parts, with the object of excluding some considerable patches of cultivation situated on the old road from Beawur to Marwar.

237. Many streams and mountain-torrents, which feed some of the larger tanks of Mhairwarra, take their rise in these hills, and the range may be said to exercise an important effect both on the neighbouring British territory as well as on the plains of Marwar.

238. The geological formation is the same as that of the neighbouring Chang tract, already described in paragraph 10.

239. *Trees, bushes, &c.*—The greater part of this tract is altogether denuded of wood, but a portion of the Borwar part has only recently been cut, and a good deal of jungle still remains in the less accessible parts, the nature of which is the same as that described in paragraph 12.

1. Ramgurh.
2. Kurantia.
3. Dhuliya.
4. Baria Ajba.
5. Baria Loonba.
6. Baria Mota.
7. Kotra.
8. Seeleberee.
9. Koondal.

240. *Village rights.*—The village rights in this tract, according to the proposed demarcation, will be vested in the nine villages noted on the margin in the proportion given in attached statement.

241. *Habitations, temples, &c.*—There are no habitations within the limits of this tract, and only one small uninhabited temple called Matajee falls within the boundaries, situated between boundary-pillars Nos. 3 and 4 in the Borwar part of the tract.

242. *Paths.*—Two paths traverse this tract—one from Ramgurh to Kotra, going from boundary-pillar No. 6 to boundary-pillar No. 9 within the limits of the Borwar portion; and another from boundary-pillar No. 7 in the direction of Marwar, in the Kotra part of the tract.

243. *Patches of cultivation.*—A few scattered patches of cultivation have been unavoidably included within the boundaries of this tract, a list of the proprietors and areas of which is attached.

244. *Maps, working-plan, &c.*—A map of this tract has been recently prepared, which shows all necessary details; and as the tract was not demarcated when the topographical surveyors were last at Ajmere, the boundaries have not been laid down on the topographical map. A rough working-plan has been prepared up to the end of March 1880, and submitted lately for the sanction of the Chief Commissioner.

ANSPAHAR TRACT, MHAIRWARRA DISTRICT.

245. *Area.*—The proposed area of this tract, according to the temporary demarcation, amounts to 1,466 acres.

246. *Description of boundaries.*—This tract is bounded on the east side by the Meywar territory, belonging, at this point, to the Thakur of Bednor, so that it has only been demarcated on the side next Mhairwarra by means of a line of 31 boundary-pillars. No. 1 boundary-pillar is placed on the Bednor boundary, about 1½ miles from the hamlet of Rajwa, near Beliawas; and at boundary-pillar No. 4 the line enters the lands of Burkochra, and then proceeds, through lands of Saroth and Doongerkhera, up to boundary-pillar No. 15. The line then enters the lands of Sheopura, and proceeds along the foot of the hill, and at boundary-pillar No. 21 passes above the temple of Anspahar, after which it descends to the base of the hill, and then enters the lands of Jeynuggur at boundary-pillar No. 23. The line then proceeds through the lands of the village of Bur, and, passing in a semi-circle above the village, again joins on the Bednor boundary at boundary-pillar No. 33. The boundary-pillars on the Bednor border are also numbered up to boundary-pillar No. 37, which encounters boundary-pillar No. 1 at the point of departure. The boundary-pillars consist of slab-stones elevated on a rubble masonry-pillar, and all have been numbered.

247. *General description of the tract.*—This tract occupies the range of hills stretching from the neighbourhood of the village of Beliawas to the village of Bur. The hills are generally steep, and the slopes to be taken up are all towards British territory.

248. The geological formation is the same as the neighbouring Beliawas tract already referred to in paragraph 52.

249. *Trees, bushes, &c.*—The whole of this tract is well covered with wood, principally composed of dhao, salur, kumta, &c., a good deal of which has been recently cut by charcoal-burners.

1. Bur.
2. Jeynuggur.
3. Sheopura.
4. Doongerkhera.
5. Saroth.
6. Burkochra.
7. Beliawas.

250. *Village rights.*—The village rights in this tract, according to the proposed demarcation, will be vested in the seven villages marginally noted in the proportion given in the attached statement.

251. *Habitations, temples, &c.*—There are two temples called Mahadeo and Debeeje within the boundaries of this tract, situated near boundary-pillar No. 21, besides which there are no other habitations, either temporary or permanent.

252. *Paths.*—Three paths traverse this tract (none of which will be interfered with when the tract is taken up), which are as follows:—

1st.—From Sheopura towards Bednor, enters the tract between boundary-pillars Nos. 17 and 18, used for foot and mounted passengers.

2nd.—From Doongerkhera over the hill to Bednor, enters the tract at boundary-pillar No. 8, used for foot passengers only.

3rd.—From Doongerkhera along nulla to Bednor enters the tract at boundary-pillar No. 5, and is used for foot and mounted passengers.

253. *Drinking-places.*—There are two drinking-places situated within this tract near boundary-pillars Nos. 62 and 78 on the Bednor boundary, sometimes used for watering the cattle of the villages of Saroth, Doongerkhera, Burkochra, and Beliawas, to which access will be allowed in case of necessity.

254. *Patches of cultivation.*—A few patches of cultivation have been included, a list of the proprietors and areas of which is attached.

255. *Maps, working-plans, &c.*—A map of this tract has recently been prepared, and as the tract was not demarcated when the topographical surveyors were last here, the boundaries

have not been entered on the topographical maps. In the same manner as for the two former tracts, a rough working-plan up to the end of March 1880 has been prepared and submitted for the sanction of the Chief Commissioner.

FORM No. 49.

FOREST DEPARTMENT, AJMERE.

Annual Summary of Revenue and Expenditure during 1876-77.

REVENUE.

BUDGET HEADS.	Rs.	A.	P.
I.—REVENUE FROM WOOD AND BAMBOOS.			
1. Brought to depôt by departmental agency—			
(a) Timber and bamboos ...			
(b) Firewood and charcoal ...	61	5	4
(c) Sandal-wood			
2. Wood and bamboos removed from the forests by purchasers, license-holders, and permit-holders—			
(a) Timber and bamboos ...			
(b) Firewood and charcoal ...	59	5	0
3. From confiscated, drift, and waif-wood.			
Carried over ...	120	10	4

BUDGET HEADS.	Rs.	A.	R.
Brought over ...	120	10	4
II.—REVENUE FROM MINOR PRODUCE.			
1. Grazing dues and sale of grass ...	256	10	0
2. Other minor produce ...	155	5	0
III.—DUTY ON PRODUCE OF FOREIGN OR PRIVATE FORESTS IMPORTED INTO BRITISH TERRITORY.			
1. On wood			
2. On other forest produce ...			
IV.—MISCELLANEOUS.			
1. From fines and forfeitures ...	250	1	1
2. From refunds to the Department ...	7	5	3
3. From other sources	115	0	8
TOTAL RECEIPTS ...	905	0	4

EXPENDITURE.

	Rs.	A.	P.
A.—CONSERVANCY AND WORKS.			
I.—COST OF TIMBER OPERATIONS.			
1. On wood and bamboos brought to depôt by departmental agency—			
(a) Timber and bamboos ...			
(b) Firewood and charcoal ...	56	9	0
(c) Sandal-wood			
2. On wood and bamboos removed from the forests by purchasers, license-holders, and permit-holders—			
(a) Timber and bamboos ...			
(b) Firewood and charcoal ...			
3. On confiscated, drift, and waif wood ...			
II.—COST OF COLLECTING MINOR PRODUCE.			
1. Grazing and sale of grass ...			
2. Other forest produce	7	0	0
III.—COST OF FOREST ORGANIZATION.			
1. Demarcation lines and boundary-pillars or mark	320	13	2
2. Working plans			
3. Surveys	605	5	2
IV.—COST OF THE TREATMENT AND CREATION OF FORESTS.			
1.—Natural forests—			
(a) Protection from fire ...	592	13	9
(b) Fencing and enclosing ...	3,741	6	11
(c) Improvement and conservation ...			
(d) "Reboisement" or restoration of denuded areas ...	5,200	0	6
2. Artificial forests—			
(a) Formation			
(b) Protection from fire			
(c) Improvement and conservation ...			
(d) Fencing and enclosing ...			
V.—RENT OF LEASED FORESTS.			
VI.—COST OF COLLECTING DUTY ON PRODUCE OF FOREIGN OR PRIVATE FORESTS IMPORTED INTO BRITISH TERRITORY.			
Carried over ...	10,524	0	6

	Rs.	A.	P.
Brought over ...	10,524	0	6
VII.—WORKS OF UTILITY FOR THE DEVELOPMENT OF FORESTS.			
1. Roads and bridges	121	9	0
2. Buildings and offices	514	8	0
3. Compensation for land taken up for forestpurposes, or for extinction of forest rights	46	8	0
4. Other works			
VIII.—COST OF DEPARTMENTAL CATTLE.			
1. Purchase of stock			
2. Hire of stock			
3. Feed and keep of cattle ...			
IX.—COST OF DEPARTMENTAL TOOLS AND PLANT.	22	9	5
1. For timber and wood operations ...			
2. For other purposes	184	4	11
X.—MISCELLANEOUS CHARGES.			
1. Refunds			
2. Law charges			
3. Other charges	19	8	6
TOTAL OF A—CONSERVANCY AND WORKS	11,433	0	4
B.—ESTABLISHMENTS.			
I.—SALARIES.			
1. Pay of Conservator			
2. Pay of control and executive officers ...	4,500	0	0
3. Protective establishments ...	3,057	2	10
4. Office establishments	1,685	3	9
5. Deputation and special allowances ...			
II.—TRAVELLING ALLOWANCES.			
1. Conservator			
2. Control and executive officers ...	942	9	9
3. Protective establishments ...			
4. Office establishments	197	9	11
III.—CONTINGENCIES.			
1. Stationery	13	9	6
2. Carriage of tents and records ...	385	5	2
3. Pay of police-guards	79	5	4
4. Sundries	162	0	8
5. Official postage	1	2	0
TOTAL B ESTABLISHMENTS ...	11,025	1	11
GRAND TOTAL OF ALL EXPENDITURE	22,458	2	3

AJMERE,
The 31st May 1877.

J. WHITE,
Deputy Commissioner, in charge of Forests, Ajmere and Mhairwarra.

FOREST DEPARTMENT.

Annual Abstract Account of the Cash transactions of the Forest Department in the Ajmere and Mhairwarra District.

DR. CR.

Year.	Heads of Account.	Rs. A. P.	Year.	Heads of Account.	Rs. A. P.
1876-77	To Cash balance on the 1st April 1876 ...	200 10 8	1876-77	By expenditure of Division { A	11,433 0 4
	„ Revenue received during the year	905 0 4		{ B	11,025 1 11
	„ Remittances from public treasuries—			„ Objectionable items not included in expenditure ...	.....
	By cheques ...	12,000 0 0		„ Remittances to public treasuries	905 0 4
	By bills ...	11,025 1 11		„ Deposits repaid ...	304 15 5
	„ Income-taxes ...	.....		„ Advances made ...	2,647 13 3*
	„ Deposits received ...	154 4 9		„ Refunds of revenue ...	.....
	„ Advances recovered ..	2,004 13 7		„ Cash in hand ...	.....
	„ Nominal remittance from Superintendent, Roorkee Workshops	26 0 0			
	TOTAL ...	26,315 15 3		TOTAL ...	26,315 15 3

* Includes Rs. 50 on account of permanent advance.

J. WHITE,

Deputy Commissioner, in charge of Forests, Ajmere and Mhairwarra.

AJMERE, *The 31st May 1877.*

No. 1495F., dated Simla, 31st October 1877.

From—The Officiating Secretary to the Government of India,

To—The Chief Commissioner of Ajmere.

I AM directed to acknowledge the receipt of your Officiating Secretary's letters Nos. 3341S., dated the 27th December 1876, and 2106S., dated the 8th August last, submitting the half-yearly reports on the progress of forest operations in Ajmere and Mhairwarra for the periods ending the 30th September 1876 and the 31st March 1877, respectively, the latter being accompanied by a very clear and useful note by Mr. Crommelin, your Officiating Secretary, reviewing the progress recorded therein, as well as by several well-arranged annual returns. I am to state that the Governor General in Council agrees with you in considering that the progress made in forest administration in Ajmere and Mhairwarra during the periods in question has been satisfactory.

2. The area of the reserves on the 31st March 1877 is reported as aggregating 64,360 acres, which would be 3·6 per cent. on the total area of the province, believed to be 2,754 square miles. This figure is apparently the result of the survey made by the Settlement Officer, and in some cases by the Forest Officer. From a statement submitted by the Superintendent of Forest Surveys, the area, according to the data obtained by the Topographical Survey Department, aggregates only 59,947 acres. The next annual report should explain whether the area as reported by the Superintendent of Forest Surveys, or that stated in the report, may be regarded as correct.

3. The detailed descriptive account of the reserves by Mr. McA. Moir has been read with interest: the document will be printed, and copies sent to you. The other original documents as per margin, received with your Secretary's letter of the 8th August, are returned. It is satisfactory to notice from Mr. McA. Moir's report that several of the reserves comprise a portion of the catchment basins of important tanks. Any marked influence which the protection of these reserves may have upon the water-supply in these tanks should be carefully noted and reported.

No. 3.—Statement showing the proportionate share of the villagers in the several forest tracts and in the revenue derived therefrom.

No 4.—Statement showing the cultivation included in the several forest tracts, &c.

No. 5.—Register of private and nazul trees included in the several forest tracts, &c.

4. It is understood that the reserves are now all completely demarcated, and that along those portions of the boundary line where they are much exposed to the inroads of cattle they have been fenced. Altogether it is reported that 40½ miles of fences are proposed to be made, of which 30¼ miles have been completed.

5. With the exception of 50 acres which were burnt in the Todgarh tract in May 1876, fire-protection is reported to have been successful to the 1st April last; this is satisfactory. Unless fires are continuously excluded, the people, whose crops depend upon the tanks fed by the streams which take their rise in these reserves, cannot derive any benefit from their protection. I am accordingly directed to suggest for your consideration whether it would not be well that every fire which may occur in the reserves, if it extends over more than a few acres, should at once be reported to you, with all the circumstances of the case.

6. Twenty cases of breaches of the forest rules are reported, in which 50 persons were prosecuted. This is moderate, and it is satisfactory evidence of good management that convictions were obtained in all but two cases.

7. The area of plantations is reported as being 311 acres. If the whole area is completely stocked, this is a satisfactory result, and, considering soil and climate, the outlay incurred on these plantations (Rs. 6,960) is not high. No areas, I am directed to state, should be included in this return (Form No. 46) that are not completely stocked.

8. The outlay on account of forest administration in Ajmere and Mhairwarra from the commencement has been as follows :—

	Receipts.	Charges.		Total Charges.
		A.	B.	
	Rs.	Rs.	Rs.	Rs.
1872-73	24	4,878	8,177	13,055
1873-74	508	15,777	8,563	24,340
1874-75	203	17,753	8,813	26,566
1875-76	410	12,963	14,383	27,346
1876-77	905	11,433	11,025	22,458
Total ...	2,050	62,804	50,961	1,13,765

9. In sanctioning this large outlay during the last five years, the Government of India has, to a great extent, been influenced by the hope, that, by strict protection of these hills, it might be possible to regulate and improve the water-supply in the tanks situated below the reserves. Experience must show how far these hopes were well founded. Under all circumstances it may be expected that these reserves will furnish a permanent supply of wood and grass, and during seasons of drought of pasture and branches for fodder to the inhabitants of a portion of the district. Government has as yet undertaken the protection of a limited area only; and the question whether considerable additions shall be made to it must be decided after more experience has been gained regarding the benefits derived from these reserves, and the outlay requisite for their protection. His Excellency in Council, however, trusts that the example set by Government in protecting a portion of the hills will be followed by private proprietors.

10. During last year the net expenditure has amounted to Rs. 225 per square mile, or nearly 6 annas per acre. For the current year Rs. 17,000 has been granted; and during 1878-79 and 1879-80 it is estimated that a net outlay of Rs. 15,000 will suffice, making allowance for the occasional deputation to Ajmere, for inspection, of a professional Forest Officer. Unless the area of the reserves is increased, the annual outlay will thus amount to Rs. 150 per square

mile, or nearly 4 annas per acre. As long as these estates yield none save an insignificant revenue, it is necessary that the outlay should be kept at as low a rate as possible; and 4 annas an acre may, in the opinion of His Excellency in Council, for the present be regarded as the maximum net expenditure that should be allowed.

11. It is, however, for consideration, whether steps might not now be taken for increasing the revenue from these estates. It is observed that of the revenue realised, Rs. 256 were on account of grazing dues; and it is also gathered from Mr. McA. Moir's detailed account of the reserves, that pasture to a considerable extent is permitted in the Todgarh and several other tracts. Among the rights vested in the villagers under section 4 of the Forest Regulation, the right of grazing is not included; and under these circumstances it would appear to be only fair that, except perhaps in the case of villages entirely included within the reserves, or in other cases the merits of which should be considered by the local officers, grazing dues should be levied. These dues may be fixed at a low rate; but, apart from the question of revenue, it is obviously necessary that some rates should be paid, in order to guard against the growth of customary rights to pasture in the reserves.

12. I am directed to state that, in future, it will suffice to submit annual instead of half-yearly reports, and it will also suffice to submit a few only of the annual statements prescribed in paragraph 190 of the Forest Department Code. Statements showing the area of the reserves (Form No. 45), of the plantations (Form No. 46), breaches of forest rules (Form No. 48), annual summary of revenue and expenditure (Form No. 49), and annual account current (Form No. 50), should be appended to the annual report.

No. 1496F.

COPY forwarded to the Foreign Department for information.